```
     FILE 'HCAPLUS' ENTERED AT 16:44:45 ON 19 MAR 2010
L1        16829 S GUAR OR GALACTOMANNAN OR (MANNO-OLIGOSACCHARIDE) OR MANNOOLIG
L2         2476 S PROANTHOCYANIDIN
L3            2 S L1 AND L2
L4        20557 S GUAR OR GALACTOMANNAN OR (MANNO-OLIGOSACCHARIDE) OR MANNOOLIG
L5       197633 S DIARRHEA OR PREBIOTIC OR PROBIOTIC OR ENTERIC OR INTESTINAL O
L6          947 S L4 AND L5
L7         4477 S (MANNO-OLIGOSACCHARIDE) OR MANNOOLIGOSACCHARIDE OR OLIGOMANNO
L8          380 S L5 AND L7

     FILE 'REGISTRY' ENTERED AT 16:47:14 ON 19 MAR 2010
                EXP METNYL-A-MANNO/CN
                EXP METHYL-A-MANNO/CN
                EXP METHYL-MANNO/CN
                EXP METHYL MANNO/CN
                EXP AMNNOOLIGO/CN
                EXP MANNOOLIGO/CN

     FILE 'HCAPLUS' ENTERED AT 16:49:01 ON 19 MAR 2010
L9          177 S L8 AND (PY<2004 OR AY<2004 OR PRY<2004)
L10      602569 S BACTERIA OR BACTERIAL OR PREBIOTIC OR PROBIOTIC
L11          64 S L9 AND L10

     FILE 'REGISTRY' ENTERED AT 16:59:32 ON 19 MAR 2010
                EXP PROANTHOCYANIDIN/CN
                EXP PROANTHOCYANIDIN A2/CN
L12          12 S E1-E12
                EXP PROANTHOCYANIDIN B3/CN
L13          10 S E3-E12
                EXP PROANTHOCYANIDIN CT/CN
L14           9 S E4-E12
                EXP PROANTHOCYANIDIN T5/CN
L15           5 S E1-E6

     FILE 'HCAPLUS' ENTERED AT 17:01:24 ON 19 MAR 2010
L16         255 S L12/THU OR L13/THU OR L14/THU OR L15/THU
L17      270725 S CHOLESTEROL OR HYPERCHOLESTEROLEM? OR HYPERLIPIDEM? OR ATHERO
L18          20 S L16 AND L17
L19           6 S L18 AND (PY<2004 OR AY<2004 OR PRY<2004)
L20         587 S L4 AND L17
L21         350 S L20 AND (PY<2003 OR AY<2003 OR PRY<2003)

     FILE 'REGISTRY' ENTERED AT 17:03:06 ON 19 MAR 2010
                EXP PARTIALLY HYDROLYZED GUAR/CN
                EXP PHGG/CN

     FILE 'HCAPLUS' ENTERED AT 17:03:39 ON 19 MAR 2010
L22         112 S MANNO-OLIGO? OR MANNOOLIGO
L23        1084 S MANNO-OLIGO? OR MANNOOLIGO?
L24          20 S L17 AND L23
L25          68 S PHGG OR (PARTIALLY HYDROLYZED GUAR)
L26          16 S L17 AND L25
L27          36 S L24 OR L26
L28           8 S L27 AND (PY<2004 OR AY<2004 OR PRY<2004)
L29           0 S METHYL(4A)((MANNOOLOGOSACCHARIDE) OR (MANNO-OLIGOSACCHRIDE) O
L30           1 S METHYL(4A)((MANNOOLIGOSACCHARIDE) OR (MANNO-OLIGOSACCHARIDE)
L31          22 S METHYL AND ((MANNOOLIGOSACCHARIDE) OR (MANNO-OLIGOSACCHARIDE)
L32          14 S L31 AND (PY<2004 OR AY<2004 OR PRY<2004)
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=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.22       0.22

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FILE COVERS 1907 - 19 Mar 2010  VOL 152 ISS 13
FILE LAST UPDATED: 18 Mar 2010  (20100318/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Dec 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s guar or galactomannan or (manno-oligosaccharide) or mannooligosaccharide or
oligomannose
         13804 GUAR
          3542 GALACTOMANNAN
          2850 MANNO
         34691 OLIGOSACCHARIDE
            42 MANNO-OLIGOSACCHARIDE
                 (MANNO(W)OLIGOSACCHARIDE)
           260 MANNOOLIGOSACCHARIDE
           369 OLIGOMANNOSE
L1       16829 GUAR OR GALACTOMANNAN OR (MANNO-OLIGOSACCHARIDE) OR MANNOOLIGOSA
               CCHARIDE OR OLIGOMANNOSE

=> s proanthocyanidin
L2        2476 PROANTHOCYANIDIN

=> s l1 and l2
L3           2 L1 AND L2

=> d l3 1-2 ti abs bib

L3   ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Large molecules as anti-adhesive compounds against pathogens
AB   Anti-adhesive compds. are potential prophylactic tools in alternative
     treatment regimes against bacterial infection, as bacterial adhesion is
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commonly mediated by carbohydrate-protein interactions between surface adhesions of microorganisms and the host cell. The use of exogenous polyvalent, high-mol. carbohydrates and tannin-like plant-derived compds. should antagonize the adhesive interaction. A range of carbohydrates and carbohydrate- and proanthocyanidin-enriched plant exts. were screened for potential anti-adhesive effects against Helicobacter pylori, Campylobacter jejuni, Porphyromonas gingivalis and Candida albicans in different in-situ assays on primary tissue. The adhesion of H. pylori on human stomach tissue was effectively blocked by glucuronic acid-enriched polysaccharides from immature okra fruits (Abelmoschus esculentus). These compds. also had strong in-vitro effects against C. jejuni (inhibition up to 80%), but were ineffective in an in-vivo study in infected chicken broilers due to metabolism in the gastrointestinal system. Polysaccharides from Glycyrrhizia glabra, also enriched with glucuronic acid, showed strong anti-adhesive properties against H. pylori and P. gingivalis (inhibition 60-70%). Pelargonium sidoides extract, containing mainly polymeric proanthocyanidins, was effective against H. pylori in a dose-dependent manner. Due to the multifunctional adhesive strategy of C. albicans, no effective compds. were detected against this yeast. Structure-activity relationships are presented and the potential in-vivo use of carbohydrate-based anti-adhesives is discussed.

AN 2007:636466 HCAPLUS <<LOGINID::20100319>>
DN 147:203161
TI Large molecules as anti-adhesive compounds against pathogens
AU Wittschier, N.; Lengsfeld, C.; Vorthems, S.; Stratmann, U.; Ernst, J. F.; Verspohl, E. J.; Hensel, A.
CS Institute for Pharmaceutical Biology and Phytochemistry, University of Muenster, Muenster, D-48149, Germany
SO Journal of Pharmacy and Pharmacology (2007), 59(6), 777-786
CODEN: JPPMAB; ISSN: 0022-3573
PB Pharmaceutical Press
DT Journal
LA English
OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Cosmetic composition for protecting the scalp from free radicals
AB The title composition comprises an aqueous dispersion, emulsion, or hydrogel containing
0.5-30 weight% enzymic radical scavenger and 0.1-20 weight% water-soluble or -dispersible film-forming agent (shellac and/or dextrin). Thus, a radical scavenger complex comprised phospholipids 7, quebracho extract (containing proanthocyanidin oligomers and gallic acid) 2, silkworm extract (containing cecropin, amino acids, and vitamins) 1, acerola (Malpighia punicifolia) fruit extract 1, vitamin C 0.5, and vitamin A 0.5% in a gel base containing Carbomer, EtOH, and glycerin. This complex 30.0, α-dextrin 5.0, β-dextrin 2.5, γ-dextrin 5.0, preservative 0.5, and H2O to 100 weight% were combined to produce a scalp spray.
AN 2000:553206 HCAPLUS <<LOGINID::20100319>>
DN 133:155161
TI Cosmetic composition for protecting the scalp from free radicals
IN Herrling, Thomas; Groth, Norbert; Golz-Berner, Karin; Zastrow, Leonhard
PA Coty B. V., Neth.
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

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PI   EP 1025835          A2    20000809    EP 2000-250030         20000131
     EP 1025835          A3    20010801
     EP 1025835          B1    20050323
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
     DE 19905127         A1    20000810    DE 1999-19905127       19990201
     AT 291414           T     20050415    AT 2000-250030         20000131
     ES 2239575          T3    20051001    ES 2000-250030         20000131
PRAI DE 1999-19905127    A     19990201
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT  5     THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> s guar or galactomannan or (manno-oligosaccharide) or mannooligosaccharide or
oligomannose or isomalto? or (iso-malto?)
         13804 GUAR
          3542 GALACTOMANNAN
          2850 MANNO
         34691 OLIGOSACCHARIDE
            42 MANNO-OLIGOSACCHARIDE
               (MANNO(W)OLIGOSACCHARIDE)
           260 MANNOOLIGOSACCHARIDE
           369 OLIGOMANNOSE
          3803 ISOMALTO?
        197983 ISO
         52028 MALTO?
            40 ISO-MALTO?
               (ISO(W)MALTO?)
L4       20557 GUAR OR GALACTOMANNAN OR (MANNO-OLIGOSACCHARIDE) OR MANNOOLIGOSA
               CCHARIDE OR OLIGOMANNOSE OR ISOMALTO? OR (ISO-MALTO?)

=> s diarrhea or prebiotic or probiotic or enteric or intestinal or microflora
         26021 DIARRHEA
          5049 PREBIOTIC
          5974 PROBIOTIC
         18248 ENTERIC
        143513 INTESTINAL
         14558 MICROFLORA
L5      197633 DIARRHEA OR PREBIOTIC OR PROBIOTIC OR ENTERIC OR INTESTINAL OR
               MICROFLORA

=> s l4 and l5
L6         947 L4 AND L5

=> s (manno-oligosaccharide) or mannooligosaccharide or oligomannose or isomalto?
or (iso-malto?)
          2850 MANNO
         34691 OLIGOSACCHARIDE
            42 MANNO-OLIGOSACCHARIDE
               (MANNO(W)OLIGOSACCHARIDE)
           260 MANNOOLIGOSACCHARIDE
           369 OLIGOMANNOSE
          3803 ISOMALTO?
        197983 ISO
         52028 MALTO?
            40 ISO-MALTO?
               (ISO(W)MALTO?)
L7         4477 (MANNO-OLIGOSACCHARIDE) OR MANNOOLIGOSACCHARIDE OR OLIGOMANNOSE
               OR ISOMALTO? OR (ISO-MALTO?)
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=> s 15 and 17
L8          380 L5 AND L7

=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    17.84      18.06

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -1.70      -1.70

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STRUCTURE FILE UPDATES:   18 MAR 2010  HIGHEST RN 1211569-35-5
DICTIONARY FILE UPDATES:  18 MAR 2010  HIGHEST RN 1211569-35-5

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TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

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predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> exp metnyl-α-manno/cn
E1            1     METNIC NICKING ENDONUCLEASE (BACILLUS HALODURANS STRAIN C-12
                    5 GENE METNICG)/CN
E2            1     METNORADRENALINE/CN
E3            0 --> METNYL-A-MANNO/CN
E4            1     METO/CN
E5            1     METOASE/CN
E6            1     METOBEN/CN
E7            1     METOBENZURON/CN
E8            1     METOBENZURON-2,4-D MIXT./CN
E9            1     METOBENZURON-BROMOXYNIL-2,4-D MIXT./CN
E10           1     METOBROMURON/CN
E11           1     METOBROMURON-ALACHLOR MIXT./CN
E12           1     METOBROMURON-FLUORODIFEN MIXTURE/CN

=> exp methyl-α-manno/cn
E1            2     METHYL-A-IONONE/CN
E2            1     METHYL-A-L-LYXOPYRANOSIDE/CN
E3            0 --> METHYL-A-MANNO/CN
E4            1     METHYL-A-METHYL-7-(METHYLAMINO)-2-FLUORENEACETATE/CN
E5            1     METHYL-A-METHYLBENZYLSULFONE/CN
E6            1     METHYL-A-NAPHTHYL-P-TOLYLARSINE/CN
E7            1     METHYL-A-NAPHTHYLPHENYLARSINE/CN
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E8              1       METHYL-B,B'-BINAPHTHYL/CN
E9              1       METHYL-B,B-DICHLORODIETHYLAMINE/CN
E10             1       METHYL-B-(7-METHOXY-4-BENZOFURANOYL)-PROPIONATE/CN
E11             1       METHYL-B-BIS(B'-CHLOROETHYL)AMINOVINYLKETONE/CN
E12             1       METHYL-B-CYANOETHYLDIETHOXYSILANE/CN

=> exp methyl-manno/cn
E1              1       METHYL-M-TOLYLHYDRAZONOMESOXALONITRILE/CN
E2              1       METHYL-M-TOLYLTHIOCARBAMOYL CHLORIDE/CN
E3              0 --> METHYL-MANNO/CN
E4              1       METHYL-N,-5-DIMETHYLANTHRANILATE/CN
E5              1       METHYL-N-((2-(ISOPROPOXYCARBONYL)PYRIDIN-3-YL)CARBONYL)GLYCI
                        NE/CN
E6              1       METHYL-N-(2-OXO-2-PHENYLETHYL)TEREPHTHALAMATE/CN
E7              1       METHYL-N-(3-(2-METHYL-2-PROPENOIC ACID) PROPYL ESTER) CARBAM
                        ATE/CN
E8              1       METHYL-N-(4-(2-METHYL-2-PROPENOIC ACID) BUTYL ESTER) CARBAMA
                        TE/CN
E9              1       METHYL-N-(6-(2-PROPENOIC ACID) HEXYL ESTER) CARBAMATE/CN
E10             1       METHYL-N-ACETYL-2,3,4,7-TETRA-O-ACETYL-B-THIOLINCOSAMIN
                        IDE/CN
E11             1       METHYL-N-ACETYL-2,3,4-TRI-O-ACETYL-7(S)-2'-ACETOXYETHOXY-7-D
                        EOXY-A-THIOLINCOSAMINIDE/CN
E12             1       METHYL-N-ACETYL-2,3,4-TRI-O-ACETYL-7-DEOXY-7(S)-2'-METHOXYET
                        HOXY-A-THIOLINCOSAMINIDE/CN

=> exp methyl manno/cn
E1              1       METHYL MANGIFEROLATE/CN
E2              1       METHYL MANGIFERONATE/CN
E3              0 --> METHYL MANNO/CN
E4              1       METHYL MANNOSIDE/CN
E5              1       METHYL MANNOSIDURONIC ACID/CN
E6              1       METHYL MARASMATE/CN
E7              1       METHYL MARGARATE/CN
E8              1       METHYL MARRUBIATE/CN
E9              1       METHYL MASLINATE/CN
E10             1       METHYL MASLINATE 2-ACETATE/CN
E11             1       METHYL MASTICADIENOLATE/CN
E12             1       METHYL MASTICADIENONATE/CN

=> exp amnnooligo/cn
E1              1       AMNISTRONE/CN
E2              1       AMNIZOL SOLUBLE/CN
E3              0 --> AMNNOOLIGO/CN
E4              1       AMNO/CN
E5              1       AMNO TLD/CN
E6              1       AMNOLAKE/CN
E7              1       AMNOS/CN
E8              1       AMNOSED/CN
E9              1       AMNOTL/CN
E10             1       AMNUCOL/CN
E11             1       AMO 1-20/CN
E12             1       AMO 140/CN

=> exp mannooligo/cn
E1              1       MANNONOYL CHLORIDE, PENTAACETATE/CN
E2              1       MANNONOYL CHLORIDE, PENTAACETATE, L-/CN
E3              0 --> MANNOOLIGO/CN
E4              1       MANNOPENTAOSE/CN
E5              1       MANNOPENTAOSE SULFATE/CN
E6              1       MANNOPENTAOSE-DI(N-ACETYL-D-GLUCOSAMINE)/CN
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E7            1     MANNOPEPTIMYCIN A/CN
E8            1     MANNOPEPTIMYCIN B/CN
E9            1     MANNOPEPTIMYCIN A/CN
E10           1     MANNOPEPTIMYCIN E/CN
E11           1     MANNOPEPTIMYCIN Γ/CN
E12           1     MANNOPEPTIN A/CN

=> file hcaplus
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                                                      ENTRY    SESSION
FULL ESTIMATED COST                                    1.47      19.53

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                    0.00      -1.70

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FILE COVERS 1907 - 19 Mar 2010  VOL 152 ISS 13
FILE LAST UPDATED: 18 Mar 2010  (20100318/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Dec 2009

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=> s l8 and (PY<2004 or AY<2004 or PRY<2004)
      24050509 PY<2004
       4827719 AY<2004
       4301330 PRY<2004
L9          177 L8 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> s bacteria or bacterial or prebiotic or probiotic
        385981 BACTERIA
        331655 BACTERIAL
          5049 PREBIOTIC
          5974 PROBIOTIC
L10     602569 BACTERIA OR BACTERIAL OR PREBIOTIC OR PROBIOTIC

=> s l9 and l10
```

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L11          64 L9 AND L10

=> d l11 1-64 ti abs bib

L11  ANSWER 1 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Liquid compositions comprising non-digestible oligosaccharides and green
     tea catechins
AB   A method and liquid compns. for restoring and/or maintaining colon
     functionality.  The method consists in administering to a human being a
     liquid composition including an effective amount of a non-digestible
     oligosaccharide, at least one green tea catechin, at least one antioxidant
     comprising ascorbic acid and a buffering agent mixture having a buffering
     capacity of at least about 50 mM, said liquid composition being in a pH range
of
     from about 4.8 to about 5.2.  A method for making the liquid compns. is also
     disclosed.  Thus, a liquid composition comprises fructooligosaccharides 7.3,
     green tea extract 0.22, carrageenan 0.25, sodium citrate dehydrate 0.86,
     citric acid anhydrous 0.4, methylparaben 0.12, sorbitol 70% 4.0, xylitol 5.0,
     disodium edentate 0.1, cranberry juice powder 0.35, ascorbic acid 0.20,
     and purified water 80.9 weight%.
AN   2009:93184  HCAPLUS <<LOGINID::20100319>>
DN   150:120385
TI   Liquid compositions comprising non-digestible oligosaccharides and green
     tea catechins
IN   Simmons, Donald L.; Dong, Cunji
PA   Dnp Canada Inc., Can.
SO   U.S. Pat. Appl. Publ., 11pp., Cont.-in-part of U.S. Ser. No. 601.241.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   US 20090022852      A1     20090122    US 2008-193280         20080818 <--
     US 20040047921      A1     20040311    US 2003-601241         20030620 <--
PRAI US 2002-390150P     P      20020621  <--
     US 2003-601241      B2     20030620  <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11  ANSWER 2 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Composition containing bacillus bifidus and lactobacillus
AB   A composition comprises oligosaccharides (fructooligosaccharide,
     xylooligosaccharide, lactulose-oligosaccharide,
     isomaltooligosaccharide, soybean oligosaccharide, etc.), barley
     leaves powder (emerald green powder obtained from tender wheat seedling),
     spirulina, bacteria powders, and additives.  The
     bacteria powders are prepared from the whole cells or cell extract of
     dead bacteria including Bifidobacterium (e.g.  Bifidobacterium
     infantis, Bifidobacterium longum, Bifidobacterium bifidum, Bifidobacterium
     adolescentis, and Bifidobacterium breve) and lactobacillus (e.g.
     Lactobacillus acidophilus, Lactobacillus fermentum, and Lactobacillus
     plantarum).  The composition can regulate the intestinal microbial
     flora, and has the functions of regulating immunity, inhibiting tumor,
     relieving constipation, regulating blood lipid, improving gastrointestinal
     function, prolonging ageing process, and protecting health.
AN   2007:947525  HCAPLUS <<LOGINID::20100319>>
TI   Composition containing bacillus bifidus and lactobacillus
IN   Chen, Xiushu; Yi, Jidong; Zhang, Bo
PA   Peop. Rep. China
SO   Faming Zhuanli Shenqing Gongkai Shuomingshu
```

CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1208620	A	19990224	CN 1997-114220	19970815 <--
PRAI	CN 1997-114220		19970815	<--	

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 3 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Health protecting preparation made from bacteria, and preparation method thereof
AB A microbial preparation, JUNYIKANG, is prepared by fermenting one or more of bifidobacteria and one or more of intestinal beneficial bacteria (such as Clostridium butyricum, Lactobacillus acidophilus, and Streptococcus thermophilus); centrifuging to obtain wet thalli; dispersing in skimmed milk powder; lyophilizing to obtain powder; and mixing with one or more of bifidus factors to make capsule, microcapsule, granule, tablet, and oral liquid Various vitamins and trace elements can be added. The above bifidobacteria are selected from bifidobacteria infantis CGMCC 0313-2, Bifidobacterium longum CGMCC 0313-5, Bifidobacterium breve CGMCC 0313-6, and Bifidobacterium bifidum CGMCC 0313-7. The bifidus factors can promote the growth and proliferation of bifidobacteria and are selected from oligosaccharide or natural plant extract (such as oranges and tangerines peel extract, Radix Ginseng extract, Folium Camelliae sinensis extract, Fructus Lycii extract, and Fructus Schisandrae Chinensis extract) or saccharide substance (such as soy oligosaccharide, fructooligosaccharide, xylooligosaccharide, galactose-oligosaccharide, lactulose-oligosaccharide, isomaltooligosaccharide, glucose oligosaccharide, melitose, stachyose, and chitosan). The preparation has the functions of improving intestinal ecol. balance, promoting beneficial bacteria growth, and inhibiting pathogenic bacteria propagation; and has therapeutic effects on dysentery, constipation, gastrointestinal dysfunction, and diarrhea. This preparation can be used as food, health product, or food additive.
AN 2007:941099 HCAPLUS <<LOGINID::20100319>>
TI Health protecting preparation made from bacteria, and preparation method thereof
IN Cui, Yunlong; Cui, Yunyu
PA Beijing Dongfang Baixin Biological Tech. Co., Ltd., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1192360	A	19980909	CN 1997-115093	19970801 <--
PRAI	CN 1997-115093		19970801	<--	

L11 ANSWER 4 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Manufacture of milk powder products containing active Bifidobacterium and isomaltooligosaccharide
AB In this invention, freeze-dried Bifidobacterium powder and isomaltooligosaccharide are used as additives to produce milk powder products that have immunity promoting and intestinal bacterial flora conditioning effects. In the milk powder products, the viable count of Bifidobacterium is above 107 cfu/g, and the water content is below 5%. The active bacteria can be selected from Bifidobacterium infantis, Bifidobacterium longum, Bifidobacterium

bifidum, Bifidobacterium adolescentis, and Bifidobacterium breve.
AN 2005:1334148 HCAPLUS <<LOGINID::20100319>>
DN 144:107334
TI Manufacture of milk powder products containing active Bifidobacterium and isomaltooligosaccharide
IN Huo, Guicheng; Meng, Xiangchen; Yang, Lijie
PA Northeast Agricultural University, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 21 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1602708	A	20050406	CN 2003-10103233	20031103 <--
	CN 1305383	C	20070321		
PRAI	CN 2003-10103233		20031103	<--	

L11 ANSWER 5 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI An oral liquid for preventing and treating human and animal diarrhea and dysentery and its preparation method
AB An oral liquid for preventing and treating diarrhea and dysentery comprises probiotic solution, Chinese medicinal decoction and Chinese medicinal decoction. The preparation method comprises: artificial culturing probiotics; decocting processed Chinese medicinal materials, concentrating decoction, and cooling; and mixing Chinese medicinal decoction, probiotic solution and probiotics, and packaging. The probiotics comprise photosynthetic bacteria, lactic acid bacteria, or Bacillus bifidus. The Chinese medicinal decoction is prepared from at least one material with effect of invigorating spleen and stomach selected from Atractylodis Rhizoma, Radix Angelicae Dahuricae, Rhizoma Atractylodis, Radix Astragali, and Zingiberis Rhizoma, and at least one antidiarrheal material selected from Fructus Crataegi, Mume Fructus, Fructus Hippophae, Fructus Schisandrae, Galla Chinensis, and Pericarpium Granati by decocting. The probiotics comprise one or two of mannan oligosaccharides, fructooligosaccharide, or isomaltose. The preparation can prevent and treat human and animal diarrhea, and also has effect of improving immunity.
AN 2005:1238286 HCAPLUS <<LOGINID::20100319>>
TI An oral liquid for preventing and treating human and animal diarrhea and dysentery and its preparation method
IN Cao, Jintang
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1589868	A	20050309	CN 2003-157620	20030831 <--
	CN 100374148	C	20080312		
PRAI	CN 2003-157620		20030831	<--	

L11 ANSWER 6 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Prebiotic effect analysis
AB A method for evaluating or quantifying the prebiotic capability of a fiber or for identifying a prebiotic substance is disclosed which comprises (a) evaluating or quantifying the effect by the tested fiber or substance on the growth and/or modification of fecal bacterial population, and (b) quantifying at least one product

resulting from the fermentation of the tested fiber or substance and/or quantifying the rate of assimilation of the tested fiber or substance. Pharmaceutical and nutritional compns. are also disclosed.

AN 2005:347188 HCAPLUS <<LOGINID::20100319>>

DN 142:404215

TI Prebiotic effect analysis

IN Vulevic, Jelena; Gibson, Glenn R.; Rastall, Robert

PA Novartis A.-G., Switz.

SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005035781	A1	20050421	WO 2004-EP10997	20041001 <--
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	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004280375	A1	20050421	AU 2004-280375	20041001 <--
	AU 2004280375	B2	20080515		
	CA 2539583	A1	20050421	CA 2004-2539583	20041001 <--
	EP 1670934	A1	20060621	EP 2004-765756	20041001 <--
	EP 1670934	B1	20081029		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	JP 2007507214	T	20070329	JP 2006-530071	20041001 <--
	US 20070196890	A1	20070823	US 2004-573603	20041001 <--
	AT 412767	T	20081115	AT 2004-765756	20041001 <--
	ZA 2006001723	A	20070725	ZA 2006-1723	20060227 <--
	HK 1094231	A1	20090710	HK 2006-113346	20061205 <--
PRAI	GB 2003-23089	A	20031002	<--	
	GB 2004-1867	A	20040128		
	WO 2004-EP10997	W	20041001		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Oligosaccharide-containing nutritional compositions that inhibit pathogen adhesion to intestinal cells

AB Saccharides (particularly oligosaccharides) are used as inhibitors of pathogen adhesion to mammalian cells (especially gut cells) and may be used in food and nutritional compns. Compds. are screened for inhibition of adhesion of specific pathogens (verocytotoxic and enteropathogenic Escherichia coli) to the colonic epithelium (HT 29 cell line) without adversely affecting the colonic microflora or adhesion of probiotic organisms. Compds. with suitable activity include mannooligosaccharides, caseinoglycomacropeptides, chitooligosaccharides, galactooligosaccharides, etc.

AN 2005:283268 HCAPLUS <<LOGINID::20100319>>

DN 142:335365

TI Oligosaccharide-containing nutritional compositions that inhibit pathogen adhesion to intestinal cells
IN Rhoades, Jonathan Robert; Rastall, Robert; Gibson, Glenn R.
PA Novartis Ag, Switz.
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005027663	A2	20050331	WO 2004-EP10469	20040917 <--
	WO 2005027663	A3	20050707		
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	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	BR 2004003979	A	20060221	BR 2004-3979	20040920 <--
	US 20060287276	A1	20061221	US 2006-572664	20060320 <--
PRAI	GB 2003-21996	A	20030919	<--	
	WO 2004-EP10469	W	20040917		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Compositions for improvement of bioavailability of effective ingredients in general food, health food, or dietary supplements
AB The compns. contain ingredients which are effective for conditioning of the intestinal environment and/or the antioxidant activity. The ingredients effective for conditioning of the intestinal environment may contain probiotics, prebiotics, and/or biogenics such as lactic acid bacteria, oligosaccharides, dietary fiber, or bifidus factor, and the ingredients effective for conditioning of the antioxidant activity may be vitamins, carotenoids, and minerals. The bioavailability of effective ingredients in general food, health food, or dietary supplements is improved by intake of the intestinal environment- and/or antioxidant activity-conditioning ingredients.
AN 2005:119962 HCAPLUS <<LOGINID::20100319>>
DN 142:197042
TI Compositions for improvement of bioavailability of effective ingredients in general food, health food, or dietary supplements
IN Kawade, Yuji; Osakabe, Naomi; Murashima, Koichiro; Baba, Seigo; Kawabata, Keiko
PA Meiji Seika Kaisha, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005034135	A	20050210	JP 2004-52598	20040227 <--
PRAI	JP 2003-187715	A	20030630	<--	

L11 ANSWER 9 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The effects of dietary additives on the growth performance and occurrence of resistant bacteria in weanling pigs
AB Unavailable
AN 2005:83836 HCAPLUS <<LOGINID::20100319>>
DN 143:132457
TI The effects of dietary additives on the growth performance and occurrence of resistant bacteria in weanling pigs
AU Pulliam, January Beth
CS Univ. of Tennessee, Knoxville, TN, USA
SO (2003) 159 pp. Avail.: UMI, Order No. DA3119409
From: Diss. Abstr. Int., B 2004, 65(1), 4
DT Dissertation
LA English

L11 ANSWER 10 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Use of isomalt (mixture of 1,6-GPS and 1,1-GPM) as a prebiotic for the production of food and feed additives and medicaments used for the treatment of intestinal diseases, among other things
AB The invention relates to a novel use of a mixture of 6-O-α-D-glucopyranosyl-D-sorbitol (1,6-GPS) and 1-O-α-D-glucopyranosyl-D-mannitol (1,1-GPM) as a bifidogenic prebiotic optionally containing a probiotic, to be used as or for producing a food item, semi-luxury food, fodder, or a medicament. Said medicament is used for the treatment and/or prevention of intestinal diseases such as chronic inflammatory intestinal diseases, intestinal cancer, bacterial intestinal infections, among other things.
AN 2004:1154570 HCAPLUS <<LOGINID::20100319>>
DN 142:73725
TI Use of isomalt (mixture of 1,6-GPS and 1,1-GPM) as a prebiotic for the production of food and feed additives and medicaments used for the treatment of intestinal diseases, among other things
IN Klingeberg, Michael; Kozianowski, Gunhild; Kunz, Markwart; Theis, Stephan
PA Suedzucker Aktiengesellschaft Mannheim/ochsenfurt, Germany
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004112505	A1	20041229	WO 2004-EP6030	20040604 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10328180	A1	20050113	DE 2003-10328180	20030616 <--
AU 2004248895	A1	20041229	AU 2004-248895	20040604 <--
CA 2527765	A1	20041229	CA 2004-2527765	20040604 <--
EP 1641354	A1	20060405	EP 2004-739586	20040604 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				

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     CN 1802101          A     20060712   CN 2004-80016063       20040604 <--
     BR 2004011528       A     20060801   BR 2004-11528          20040604 <--
     JP 2006527586       T     20061207   JP 2006-515829         20040604 <--
     ZA 2005009146       A     20070328   ZA 2005-9146           20040604 <--
     IN 2005MN01273      A     20081024   IN 2005-MN1273         20051118 <--
     KR 2006030042       A     20060407   KR 2005-724024         20051214 <--
     MX 2005013815       A     20060313   MX 2005-13815          20051216 <--
     NO 2006000185       A     20060315   NO 2006-185            20060111 <--
     US 20060147500      A1    20060706   US 2006-561122         20060202 <--
PRAI DE 2003-10328180    A     20030616  <--
     WO 2004-EP6030      W     20040604
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   3     THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11  ANSWER 11 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Dietary supplements for dogs containing live bacterial cell
     preparations, etc., to prevent or relieve gastrointestinal diseases
AB   The supplements contain beer yeasts, live bacterial cell
     prepns., oligosaccharides, and tea exts.  Thus, administration of tablets
     containing beer yeast powder, Bifidobacterium powder, Streptococcus faecalis
     powder, Bacillus natto, raffinose, and tea extract to dogs decreased
     incidence of diarrhea, etc.
AN   2004:1125132  HCAPLUS <<LOGINID::20100319>>
DN   142:55245
TI   Dietary supplements for dogs containing live bacterial cell
     preparations, etc., to prevent or relieve gastrointestinal diseases
IN   Matsuoka, Sayuri
PA   Fancl Corporation, Japan
SO   Jpn. Kokai Tokkyo Koho, 8 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   JP 2004357505        A     20041224    JP 2003-156067         20030530 <--
PRAI JP 2003-156067               20030530  <--
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11  ANSWER 12 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Lactobacillus-oligosaccharide combination for promoting digestive tract
     health.
AB   The invention concerns a composition comprising a Lactobacillus strain and a
     non-digestible oligosaccharide for promotion of digestive tract health.
AN   2004:872645  HCAPLUS <<LOGINID::20100319>>
DN   141:365496
TI   Lactobacillus-oligosaccharide combination for promoting digestive tract
     health.
IN   Beer, Michael; Gibson, Glenn R.; Smejka, Christopher
PA   Novartis Nutrition Ag, Switz.; University of Reading
SO   PCT Int. Appl., 36 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2004089115        A1    20041021    WO 2004-EP3736         20040407 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG

    AU 2004228936         A1    20041021    AU 2004-228936          20040407 <--
    AU 2004228936         B2    20070712
    CA 2521380            A1    20041021    CA 2004-2521380         20040407 <--
    EP 1613180            A1    20060111    EP 2004-726152          20040407 <--
    EP 1613180            B1    20080123
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    BR 2004009362         A     20060425    BR 2004-9362            20040407 <--
    CN 1784151            A     20060607    CN 2004-80012441        20040407 <--
    JP 2006522766         T     20061005    JP 2006-505051          20040407 <--
    NZ 542717             A     20061130    NZ 2004-542717          20040407 <--
    AT 384448             T     20080215    AT 2004-726152          20040407 <--
    ZA 2005007743         A     20071031    ZA 2005-7743            20050926 <--
    MX 2005010862         A     20060330    MX 2005-10862           20051007 <--
    US 20060165670        A1    20060727    US 2006-551107          20060320 <--
PRAI GB 2003-8104         A     20030408  <--
    WO 2004-EP3736        W     20040407
OSC.G   5     THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE.CNT  6     THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11  ANSWER 13 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Nutritional compositions comprising probiotics.
AB   The present invention provides a food or nutritional product for
     consumption by individuals who want to maintain a healthy gastrointestinal
     tract; the probiotic composition is efficacious in removing toxic
     nitrogenous byproducts of metabolism  Embodiments of the invention further
     include health bars yogurt, yogurt-based products and foods that contain
     one or more vitamins and/or minerals, in addition to carbohydrate, fat and
     protein components.
AN   2004:681180  HCAPLUS <<LOGINID::20100319>>
DN   141:173344
TI   Nutritional compositions comprising probiotics.
IN   Ranganathan, Natarajan
PA   USA
SO   U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. Pat. Appl. 2002
     187,134.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 8
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
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PI   US 20040161422      A1     20040819    US 2003-689359          20031020 <--
     US 20010051150      A1     20011213    US 2000-557011          20000420 <--
     US 6706263          B2     20040316
     US 20020187134      A1     20021212    US 2001-855346          20010515 <--
     US 6706287          B2     20040316
     US 20040197352      A1     20041007    US 2004-803211          20040318 <--
     AU 2004277417       A1     20050414    AU 2004-277417          20040930 <--
     CA 2540467          A1     20050414    CA 2004-2540467         20040930 <--
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     WO 2005032591        A1    20050414    WO 2004-US32250        20040930 <--
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              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
              EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
              SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
     EP 1675617           A1    20060705    EP 2004-789401         20040930 <--
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
     CN 1871031           A     20061129    CN 2004-80031264       20040930 <--
     JP 2007507526        T     20070329    JP 2006-534116         20040930 <--
     US 20060257375       A1    20061116    US 2006-279159         20060410 <--
PRAI US 1999-131774P      P     19990430  <--
     US 2000-557011       A2    20000420  <--
     US 2001-855346       A2    20010515  <--
     US 2003-676558       A     20030930  <--
     US 2003-676622       A     20030930  <--
     US 2003-689359       A2    20031020  <--
     US 2004-803211       A     20040318
     WO 2004-US32250      W     20040930
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11  ANSWER 14 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Foods for inoculating and proliferating useful bacteria in
     intestine, health foods containing them, and manufacture of them
AB   Title foods are manufactured by mixing agar powder and useful
     intestinal bacteria powder with water, then granulation.
     Thus, ingestion of granules containing agar and Enterococcus faecium reduced
     serum neutral fat level, increased the number of the bacteria in
     feces, and decreased the odor.
AN   2004:631395  HCAPLUS <<LOGINID::20100319>>
DN   141:156481
TI   Foods for inoculating and proliferating useful bacteria in
     intestine, health foods containing them, and manufacture of them
IN   Murakami, Noriko
PA   Seikatsu Bunkasha Y. K., Japan
SO   Jpn. Kokai Tokkyo Koho, 10 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   JP 2004215561       A      20040805    JP 2003-6162           20030114 <--
     JP 4135505          B2     20080820
PRAI JP 2003-6162                20030114  <--

L11  ANSWER 15 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Prebiotic compositions containing oligosaccharides for control
     of intestinal disorders such as inflammatory bowel disease,
     diarrhea and constipation.
AB   The present invention concerns nutritional compns. comprising
     oligosaccharides for controlling inflammatory bowel disease and related
     disorders, such as diarrhea and constipation.
AN   2004:513455  HCAPLUS <<LOGINID::20100319>>
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DN 141:53289
TI Prebiotic compositions containing oligosaccharides for control of intestinal disorders such as inflammatory bowel disease, diarrhea and constipation.
IN Gibson, Glenn R.; Beer, Michael
PA Novartis Nutrition Ag, Switz.
SO PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004052121	A1	20040624	WO 2003-EP14087	20031211 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
	RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
	US 20040131659	A1	20040708	US 2003-721652	20031125 <--
	CA 2508693	A1	20040624	CA 2003-2508693	20031211 <--
	AU 2003294835	A1	20040630	AU 2003-294835	20031211 <--
	EP 1571923	A1	20050914	EP 2003-785796	20031211 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003017272	A	20051108	BR 2003-17272	20031211 <--
	CN 1731938	A	20060208	CN 2003-80105558	20031211 <--
	JP 2006509797	T	20060323	JP 2004-558076	20031211 <--
	NZ 540576	A	20070330	NZ 2003-540576	20031211 <--
	RU 2358474	C2	20090620	RU 2005-121665	20031211 <--
	ZA 2005004385	A	20060726	ZA 2005-4385	20050530 <--
	MX 2005006266	A	20050819	MX 2005-6266	20050610 <--
PRAI	GB 2002-29015	A	20021212	<--	
	WO 2003-EP14087	W	20031211	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Use of prebiotics for preventing or treating oxidative stress
AB The invention discloses the use of a prebiotic for the preparation of food prepns., nutraceuticals, or pharmaceutical compns. intended for the prevention or the treatment of oxidative stress in particular related to the consumption of fructose. The invention also discloses a food preparation including simple carbohydrates, in particular fructose, in combination with prebiotics.
AN 2004:512196 HCAPLUS <<LOGINID::20100319>>
DN 141:65134
TI Use of prebiotics for preventing or treating oxidative stress
IN Gueux, Elyett; Rayssiguier, Yves; Busserolles, Jerome; Mazur, Andre
PA Institut National De La Recherche Agronomique Inra, Fr.
SO Fr. Demande, 17 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2848783	A1	20040625	FR 2002-16136	20021218 <--
	FR 2848783	B1	20050513		
	CA 2510766	A1	20040708	CA 2003-2510766	20031217 <--
	WO 2004056210	A1	20040708	WO 2003-FR3770	20031217 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003300651	A1	20040714	AU 2003-300651	20031217 <--
	EP 1571926	A1	20050914	EP 2003-813628	20031217 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006510703	T	20060330	JP 2004-561561	20031217 <--
	US 20060252725	A1	20061109	US 2005-539632	20051109 <--
PRAI	FR 2002-16136	A	20021218	<--	
	WO 2003-FR3770	W	20031217	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Constipation treatment compositions containing roasted cereals, oligosaccharides,etc.
AB The compns., which normalize intestinal flora, show long-lasting stomach-filling effect, and promote bowel movement, comprise (a) ≥1 roasted cereal selected from soybean, barley, brown rice, glutinous rice, Setalia italica, Panicum miliaceum, and corn 10-30, (b) water-soluble dietary fibers except those contained in the roasted cereal 10-60, (c) oligosaccharides 5-25, (d) tea polyphenols 0.01-1, and (e) lactic acid bacteria 0.01-1%. Thus, granules were manufactured from a composition containing indigestible dextrin 55, isomaltooligosaccharides 21, roasted soybean 4, roasted barley 4, roasted brown rice 4, roasted glutinous rice 3, roasted Setalia italica 3, roasted corn 3, roasted chestnut 2, catechin 0.5, and lactic acid bacteria (Bifidobacterium, Staphylococcus faecalis, and Lactobacillus acidophilus) 0.5% using H2O as binder. Administration of the granules to healthy adult volunteers increased defecation frequency.
AN 2004:450766 HCAPLUS <<LOGINID::20100319>>
DN 141:12292
TI Constipation treatment compositions containing roasted cereals, oligosaccharides,etc.
IN Iwanaga, Shoji
PA Nikken Corporation, Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004155727	A	20040603	JP 2002-324157	20021107 <--
PRAI	JP 2002-324157		20021107	<--	

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 18 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Hydrogenated condensed palatinose preparation and use in food and drug manufacture.
AB The present invention concerns procedures for the production of condensed palatinose in hydrogenated form and use of the hydrogenated condensed palatinose in manufacture of food and drugs.
AN 2004:249237 HCAPLUS <<LOGINID::20100319>>
DN 140:286532
TI Hydrogenated condensed palatinose preparation and use in food and drug manufacture.
IN Haji, Begli Alireza; Klingeberg, Michael; Kunz, Markwart; Vogel, Manfred
PA Suedzucker Aktiengesellschaft Mannheim/Ochsenfurt, Germany
SO Ger. Offen., 38 pp., Division of Ger. Offen. 10,242,062.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10262005	A1	20040325	DE 2002-10262005	20020911 <--
	DE 10262005	B4	20051110		
	DE 10242062	A1	20040325	DE 2002-10242062	20020911 <--
	DE 10242062	B4	20070215		
PRAI	DE 2002-10242062	A2	20020911	<--	
	DE 2002-10262005	A2	20020911	<--	

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 19 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI hydrogenated condensed palatinose preparation and use in food and drug manufacture
AB The present invention concerns procedures for the production of condensed palatinose in hydrogenated form and use of the hydrogenated condensed palatinose in manufacture of food and drugs.
AN 2004:246919 HCAPLUS <<LOGINID::20100319>>
DN 140:286531
TI hydrogenated condensed palatinose preparation and use in food and drug manufacture
IN Haji, Begli Alireza; Klingeberg, Michael; Kunz, Markwart; Vogel, Manfred
PA Suedzucker Aktiengesellschaft Mannheim/Ochsenfurt, Germany
SO Ger. Offen., 44 pp., Division of Ger. Offen. 10,262,005
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10242062	A1	20040325	DE 2002-10242062	20020911 <--
	DE 10242062	B4	20070215		
	DE 10262005	A1	20040325	DE 2002-10262005	20020911 <--
	DE 10262005	B4	20051110		
	CA 2498659	A1	20040415	CA 2003-2498659	20030902 <--
	WO 2004031202	A2	20040415	WO 2003-EP9725	20030902 <--
	WO 2004031202	A3	20040506		

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            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2003271575       A1    20040423    AU 2003-271575          20030902 <--
    EP 1539779          A2    20050615    EP 2003-753376          20030902 <--
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    BR 2003014247       A     20050726    BR 2003-14247           20030902 <--
    CN 1681831          A     20051012    CN 2003-821413          20030902 <--
    CN 1324039          C     20070704
    JP 2006512298       T     20060413    JP 2004-540575          20030902 <--
    US 20050222406      A1    20051006    US 2005-527523          20050310 <--
PRAI DE 2002-10262005   A2    20020911  <--
    DE 2002-10242062    A2    20020911  <--
    WO 2003-EP9725      W     20030902  <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   2     THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT  2     THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11  ANSWER 20 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Use of prebiotics for the prevention of onset of Type II diabetes
AB   The invention discloses the use of prebiotics for the preparation of food or
     pharmaceutical compns. intended for the prevention of the appearance of
     type II diabetes in subjects presenting a predisposition to develop this
     type of diabetes, as well as the food and pharmaceutical compns. containing
     these prebiotics.
AN   2004:218529  HCAPLUS <<LOGINID::20100319>>
DN   140:264511
TI   Use of prebiotics for the prevention of onset of Type II diabetes
IN   Monsan, Pierre; Valet, Philippe; Remaud, Simeon Magali; Saulnier, Blache
     Jean Sebastien
PA   Institut National de la Recherche Agronomique INRA, Fr.
SO   Fr. Demande, 22 pp.
     CODEN: FRXXBL
DT   Patent
LA   French
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    --------------------    --------
PI   FR 2844453          A1     20040319    FR 2002-11389           20020913 <--
     FR 2844453          B1     20060519
     WO 2004024167       A2     20040325    WO 2003-FR2705          20030912 <--
     WO 2004024167       A3     20040513
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003282156       A1     20040430    AU 2003-282156          20030912 <--
     EP 1539195          A2     20050615    EP 2003-773775          20030912 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     ZA 2005002976       A      20060628    ZA 2005-2976            20050413 <--
     US 20060100172      A1     20060511    US 2005-527819          20051011 <--
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     US 7618951           B2    20091117
PRAI FR 2002-11389        A     20020913  <--
     WO 2003-FR2705       W     20030912  <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   2     THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11  ANSWER 21 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Medicament, food supplement, and fodder additive containing plant-origin
     antioxidants and prebiotics.
AB   The invention relates to a medicament, food supplement, or fodder additive
     containing prebiotics and plant-based antioxidants, especially
oligosaccharides and
     grapeseed and herb exts.
AN   2004:182715  HCAPLUS <<LOGINID::20100319>>
DN   140:198447
TI   Medicament, food supplement, and fodder additive containing plant-origin
     antioxidants and prebiotics.
IN   Berkulin, Wilhelm; Pischel, Ivo
PA   Finzelberg G.m.b.H. & Co. K.-G., Germany
SO   PCT Int. Appl., 8 pp.
     CODEN: PIXXD2
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.            KIND   DATE        APPLICATION NO.          DATE
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PI   WO 2004017979         A2     20040304    WO 2003-EP9068           20030815 <--
     WO 2004017979         A3     20040422
          W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
              PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
              TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
              FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003266285         A1     20040311    AU 2003-266285           20030815 <--
     EP 1530479            A2     20050518    EP 2003-792330           20030815 <--
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRAI EP 2002-18416         A     20020816  <--
     WO 2003-EP9068        W     20030815  <--
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT  6     THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11  ANSWER 22 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Composite compositions containing multivalent antibodies and saccharides
     and Chinese medicines for preventing and treating diarrhea of
     young animals
AB   The compound preparation is composed of multivalent antibody 2-15; antibody
     protectant 5-25; oligofructose 0.5-5, oligomannose 0.5-5, yeast
     polysaccharide 0.5-5 parts and Chinese herb medicines.  The multivalent
     antibody obtained from egg yolk is prepared by immunizing hen with
     Salmonella, Escherichia coli, Bacillus welchii, or the deactivated
     bacteria of rabbit plaque virus-Bacillus pastorianus-Bacillus
     welchii, bradsot-lamb dysentery-cataplexy-enteric toxemia-
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infectious hepatitis sequestrans vaccine, infectious gastroenteritis vaccine, and rotavirus-induced diarrhea vaccine 2 w before laying; immunizing with multivalent vaccine of E. coli and deactivated vaccine of pseudorabies virus 2 w after the fist immunization; immunizing with infectious gastroenteritis vaccine, rotavirus-induced diarrhea vaccine, and diarrhea vaccine 4 w after the first immunization; immunizing with the vaccines and bacteria of the first immunization 6 w after the first immunization; collecting egg 8 w after the first immunization, separating egg white and yolk; adjusting egg yolk with 0.1-1.0N HCl in water to pH 5.0-5.8, precipitating with NaCl (0.5-0.9%) and polyethylene glycol 6,000 (3.5-5.0% w/v) for 10-20 min, standing for 0.5-24 h, centrifuging at 4-20°C for 10-30 min; precipitating supernatant with polyethylene glycol 6,000 (12-15% w/v) at pH 6.8-7.5, centrifuging to obtain crude product and purifying via precipitation The Chinese medicines are composed of 5 or more of the following: Phellodendron 0.5-10, Thuja orientalis leaf 0.5-10, Coptis chinensis 0.5-15, cortex fraxini 0.5-8, Pulsatilla chinensis 0.5-8, Atractylodes chinensis 0.5-10, Saussurea 0.5-10, Sophora flavescens 0.5-10, Plantago asiatica 0.5-5, and Alisma orientale 0.5-5 parts, which are obtained by extracting the raw plants with water, concentrating, and spray drying.

AN 2004:110903 HCAPLUS <<LOGINID::20100319>>

DN 141:28614

TI Composite compositions containing multivalent antibodies and saccharides and Chinese medicines for preventing and treating diarrhea of young animals

IN Zhang, Yongfei

PA Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 18 pp.
CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1370575	A	20020925	CN 2002-100132	20020109 <--
	CN 1153591	C	20040616		
PRAI	CN 2002-100132		20020109	<--	

L11 ANSWER 23 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Prebiotics affect nutrient digestibility but not faecal ammonia in dogs fed increased dietary protein levels

AB Increased dietary protein content and less digestible protein sources can lead to bad fecal odor. The effects of adding prebiotics to dog diets enriched with animal-derived protein sources on apparent digestibilities and fecal ammonia concns. were studied. In 3 consecutive periods, 8 healthy beagle dogs were fed com. diet gradually supplemented with up to 50% meat and bone meal (MBM), greaves meal (GM), or poultry meal (PM). Afterwards, 3% fructooligosaccharides or isomaltooligosaccharides were substituted for 3% of the total diet. The added animal protein sources did not decrease much the apparent N digestibility, but oligosaccharides did. The bacterial N content (as % of dry matter) in feces was highest in the oligosaccharide groups, followed by the protein-supplemented groups, and lowest in controls. When the apparent N digestibility was corrected for bacterial N, no significant differences were noted anymore, except for the GM group where the corrected N digestibility was still lower after oligosaccharide supplementation. The fecal ammonia levels were increased by added protein or oligosaccharides in the MBM and GM groups, but not in the PM group. When the apparent N digestibility data are interpreted, a correction for bacterial N should be considered, especially when prebiotics are added

to the diet. The oligosaccharides did not decrease the fecal ammonia concns. as expected.
AN 2003:1013518 HCAPLUS <<LOGINID::20100319>>
DN 140:216799
TI Prebiotics affect nutrient digestibility but not faecal ammonia in dogs fed increased dietary protein levels
AU Hesta, M.; Roosen, W.; Janssens, G. P. J.; Millet, S.; De Wilde, R.
CS Laboratory of Animal Nutrition, Faculty of Veterinary Medicine, Ghent University, Merelbeke, 9820, Belg.
SO British Journal of Nutrition (2003), 90(6), 1007-1014
CODEN: BJNUAV; ISSN: 0007-1145
PB CABI Publishing
DT Journal
LA English
OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 24 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Encapsulation in LentiKats of Dextransucrase from Leuconostoc mesenteroides NRRL B-1299, and its Effect on Product Selectivity
AB Insol. (cell-bound) dextransucrase from Leuconostoc mesenteroides B-1299 was encapsulated in highly elastic and stable hydrogels formed by polyvinyl alc. The gelation was carried out by controlled partial drying at room temperature, resulting in lens-shaped particles, called LentiKats. A similar recovery of activity (approx. 55%) was achieved when compared with entrapment in calcium alginate gels. Under reaction conditions, the protein leakage in LentiKats was reduced from 18% to 4% by pre-treatment of the dextransucrase with glutaraldehyde. The immobilized dextransucrases were tested in the acceptor reaction with Me α-D-glucopyranoside. The conversion to oligosaccharides using Lentikat-dextransucrase was higher than that obtained for alginate-dextransucrase, probably due to the reduction of diffusional limitations derived from its lenticular shape. In addition, a shift of selectivity towards the synthesis of oligosaccharides containing α(1→2) bonds was observed for the Lentikat-biocatalysts. These non-digestible compds. are supposed to be specifically fermented by beneficial species of the human microflora (prebiotic effect). The Lentikat-entrapped dextransucrase can be efficiently reused in this process at least for five cycles of 24 h.
AN 2003:989606 HCAPLUS <<LOGINID::20100319>>
DN 140:320054
TI Encapsulation in LentiKats of Dextransucrase from Leuconostoc mesenteroides NRRL B-1299, and its Effect on Product Selectivity
AU Gomez De Segura, Aranzazu; Alcalde, Miguel; Plou, Francisco J.; Remaud-Simeon, Magali; Monsan, Pierre; Ballesteros, Antonio
CS Departamento de Biocatalisis Instituto de Catalisis y Petroleoquimica, CSIC, Madrid, 28049, Spain
SO Biocatalysis and Biotransformation (2003), 21(6), 325-331
CODEN: BOBOEQ; ISSN: 1024-2422
PB Taylor & Francis Ltd.
DT Journal
LA English
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Development of a quantitative tool for the comparison of the prebiotic effect of dietary oligosaccharides
AB Aims: To develop a quant. equation [prebiotic index (PI)] to aid

the anal. of prebiotic fermentation of com. available and novel prebiotic carbohydrates in vitro, using previously published fermentation data. Methods: The PI equation is based on the changes in key bacterial groups during fermentation The bacterial groups incorporated into this PI equation were bifidobacteria, lactobacilli, clostridia and bacteroides. The changes in these bacterial groups from previous studies were entered into the PI equation in order to determine a quant. PI score. PI scores were than compared with the qual. conclusions made in these publications. In general the PI scores agreed with the qual. conclusions drawn and provided a quant. measure. Conclusions: The PI allows the magnitude of prebiotic effects to be quantified rather than evaluations being solely qual. Significance and Impact of the Study: The PI equation may be of great use in quantifying prebiotic effects in vitro. It is expected that this will facilitate more rational food product development and the development of more potent prebiotics with activity at lower doses.

AN 2003:889276 HCAPLUS <<LOGINID::20100319>>
DN 139:363694
TI Development of a quantitative tool for the comparison of the prebiotic effect of dietary oligosaccharides
AU Palframan, R.; Gibson, G. R.; Rastall, R. A.
CS Food Microbial Sciences Unit, School of Food Biosciences, The University of Reading, Reading, Berkshire, UK
SO Letters in Applied Microbiology (2003), 37(4), 281-284
CODEN: LAMIE7; ISSN: 0266-8254
PB Blackwell Publishing Ltd.
DT Journal
LA English
OSC.G 34 THERE ARE 34 CAPLUS RECORDS THAT CITE THIS RECORD (34 CITINGS)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 26 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The use of dead-end and cross-flow nanofiltration to purify prebiotic oligosaccharides from reaction mixtures
AB Nanofiltration (NF) of model sugar solns. and com. oligosaccharide mixts. were studied in both dead-end and cross-flow modes. Preliminary trials, with a dead-end filtration cell, demonstrated the feasibility of fractionating monosaccharides from disaccharides and oligosaccharides in mixts., using loose nanofiltration (NF-CA-50, NF-TFC-50) membranes. During the nanofiltration purification of a com. oligosaccharide mixture, yields of 19% for the monosaccharides and 88% for di, and oligosaccharides were obtained for the NF-TFC-50 membrane after four filtration steps, indicating that removal of the monosaccharides is possible, with only minor losses of the oligosaccharide content of the mixture The effects of pressure, feed concentration, and filtration temperature were studied in similar expts. carried out in a cross-flow system, in full recycle mode of operation. The rejection rates of the sugar components increased with increasing pressure, and decreased with both increasing total sugar concentration in the feed and increasing temperature Continuous diafiltration (CD) purification of model sugar solns. and com. oligosaccharide mixts. using NF-CA-50 (at 25°C) and DS-5-DL (at 60°) membranes, gave yield values of 14 to 18% for the monosaccharide, 59 to 89% for the disaccharide and 81 to 98% for the trisaccharide present in the feed. The study clearly demonstrates the potential of cross flow nanofiltration in the purification of oligosaccharide mixts. from the contaminant monosaccharides.
AN 2003:878653 HCAPLUS <<LOGINID::20100319>>
DN 141:107866

TI The use of dead-end and cross-flow nanofiltration to purify prebiotic oligosaccharides from reaction mixtures
AU Grandison, Alistair S.; Goulas, Athanasios K.; Rastall, Robert A.
CS School of Food Biosciences, The University of Reading, Reading, RG6 6AP, UK
SO Songklanakarin Journal of Science and Technology (2002), 24(Suppl.), 915-928
CODEN: SJSTA2
PB Songklanakarin Journal of Science and Technology
DT Journal
LA English
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 27 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Herbal extract and preparation thereof
AB A process for preparing a herbal extract comprises the steps of mixing herbal matter with water to produce an aqueous extract solution, adding a nutritive supplement capable of supporting bacterial fermentation to the solution, seeding the resulting mixture with probiotic bacteria, and incubating the seeded mixture to effect fermentation of the herbal matter. A mixture containing artichoke powder 20, dandelion (Taraxacum officinale) 20, strawberry leaf powder 20, yeast extract 1.87, peptone from pancreatically 0.125, dextrose 1.87, blackstrap molasses 0.625 g/L and Lactobacillus acidophilus was used to prepare herbal extract of the invention.
AN 2003:777103 HCAPLUS <<LOGINID::20100319>>
DN 139:281199
TI Herbal extract and preparation thereof
IN Teasdale, Steve; Lafrance, Corinne
PA Can.
SO U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20030185811	A1	20031002	US 2001-776870	20010206 <--
AU 2002226224	A1	20020819	AU 2002-226224	20020117 <--
PRAI US 2001-776870	A	20010206 <--		
WO 2002-CA55	W	20020117 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 28 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Prebiotic oligosaccharides via alternansucrase acceptor reactions
AB Alternansucrase synthesizes an alternating α-(1→3),α-(1→6)-D-glucan via glucosyl transfer from sucrose. It also synthesizes oligosaccharides, containing both types of linkages, when acceptor sugars are present. We have used alternansucrase to synthesize oligosaccharides from maltose, maltodextrins, maltitol, cellobiose, raffinose, melibiose, lactose, gentiobiose and other carbohydrate acceptors. Anal. of the products shows that alternansucrase is better at catalyzing acceptor reactions when compared to dextransucrase, and that the structures of the products differ. Whereas dextransucrase generally makes only a single product from any given acceptor, alternansucrase often makes two or more, and in higher yields. Several of these oligosaccharide acceptor products have been isolated and

tested for their ability to support the growth of probiotic bacteria, including selected strains of Bifidobacterium spp. and Lactobacillus spp. Certain acceptor products supported growth of probiotic strains but did not serve as substrates for undesirable bacteria such as Salmonella choleraesuis, Clostridium perfringens, or Escherichia coli.

AN 2003:571572 HCAPLUS <<LOGINID::20100319>>
DN 140:302361
TI Prebiotic oligosaccharides via alternansucrase acceptor reactions
AU Cote, Gregory L.; Holt, Scott M.; Miller-Fosmore, Candace
CS Fermintation Biotechnology Research Unit, National Center for Agricultural Utilization Research, Agricultural Research Service, U.S. Department of Agriculture, Peoria, IL, 61604, USA
SO ACS Symposium Series (2003), 849(Oligosaccharides in Food and Agriculture), 76-89
CODEN: ACSMC8; ISSN: 0097-6156
PB American Chemical Society
DT Journal
LA English
OS CASREACT 140:302361
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 29 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI In vitro digestibility and fermentation of mannooligosaccharides from coffee mannan
AB Digestibility of mannooligosaccharides obtained from thermal hydrolysis of spent coffee grounds was examined by in vitro digestion method. Mannooligosaccharides were resistant to human salivary α-amylase, artificial gastric juice, porcine pancreatic enzymes and rat intestinal mucous enzymes. Fermentation products of mannooligosaccharides in human large intestine were estimated by in vitro fecal incubation method. Mannooligosaccharides were fermented by human fecal bacteria and the products of fermentation were short chain fatty acids. Acetic, propionic and n-butyric acids were the main short chain fatty acids as end fermentation products. These results suggest that mannooligosaccharides are indigestible saccharides and are converted to short chain fatty acids in human large intestine. The short chain fatty acids are thought to improve the large intestinal environment. Moreover, they are absorbed and utilized by the host as an energy source.
AN 2003:455300 HCAPLUS <<LOGINID::20100319>>
DN 139:179252
TI In vitro digestibility and fermentation of mannooligosaccharides from coffee mannan
AU Asano, Ichiro; Hamaguchi, Kengo; Fujii, Shigeyoshi; Iino, Hisakazu
CS Research and Development, Ajinomoto General Foods Inc., Mie, 513-8632, Japan
SO Food Science and Technology Research (2003), 9(1), 62-66
CODEN: FSTRFS; ISSN: 1344-6606
PB Japanese Society for Food Science and Technology
DT Journal
LA English
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 30 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Pet food containing colostrum, a probiotic, and a prebiotic

AB A feed composition with health benefits, particularly for the development of the gastrointestinal tract during weaning in puppies or kittens, comprises colostrum, a probiotic, and a prebiotic. Thus, a dairy treat may include 43% sucrose, 30% hydrogenated vegetable fat, 15% colostrum, 5% yogurt powder, 3% prebiotic, 2% probiotic , and other ingredients. Lactobacillus acidophilus may be used as the probiotic.

AN 2003:396643 HCAPLUS <<LOGINID::20100319>>

DN 138:400863

TI Pet food containing colostrum, a probiotic, and a prebiotic

IN Giffard, Catriona Julie; Kendall, Peter

PA Mars Incorporated, USA

SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2003041512	A1	20030522	WO 2002-GB5053	20021108	<--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
	AU 2002339112	A1	20030526	AU 2002-339112	20021108	<--
	AU 2002339112	B2	20071011			
	GB 2382528	A	20030604	GB 2002-26137	20021108	<--
	GB 2382528	B	20040505			
	EP 1446023	A1	20040818	EP 2002-777492	20021108	<--
	EP 1446023	B1	20090225			
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK					
	JP 2005508647	T	20050407	JP 2003-543412	20021108	<--
	AT 423475	T	20090315	AT 2002-777492	20021108	<--
	US 20050079244	A1	20050414	US 2004-495289	20041123	<--
	AU 2008200052	A1	20080131	AU 2008-200052	20080107	<--
	US 20080260893	A1	20081023	US 2008-34190	20080409	<--
PRAI	GB 2001-27152	A	20011112	<--		
	GB 2001-27528	A	20011116	<--		
	AU 2002-339112	A3	20021108	<--		
	WO 2002-GB5053	W	20021108	<--		
	US 2004-495289	B1	20041123			

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 31 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Effects of isomalto-oligosaccharides on broiler performance and intestinal microflora

AB The effects of dietary isomaltooligosaccharides (IMO) on broiler chicken growth performance and intestinal microflora were studied. Male Arbor Acres chickens (n=360) were fed basal diet with 0 (control), 0.3, 0.6, 0.9, or 1.2% IMO. The chickens had access to feed and water ad libitum during the 7-wk experiment At the end of the experiment, the

thymus index and viable counts of Lactobacillus, Escherichia coli, and total aerobic bacteria in the digestive tract were determined The digesta short-chain fatty acid (SCFA) levels were determined by GC. The dietary IMO enhanced growth performance during the initial 3 wk, but no further effects were seen during the remaining 4 wk of the experiment Isobutyrate levels in the crop content and acetate levels in the duodenum digesta were decreased by IMO supplementation. Isovalerate levels in the duodenum digesta were decreased in the 0.3 and 0.6% IMO groups, whereas the jejunum butyrate and isobutyrate levels in the 0.3% IMO group were higher than in the other groups. The facultative microflora of the crop and cecum was not affected by IMO feeding. The thymus index was increased in chickens fed 0.3% IMO.

AN 2003:328854 HCAPLUS <<LOGINID::20100319>>
DN 139:68444
TI Effects of isomalto-oligosaccharides on broiler performance and intestinal microflora
AU Zhang, W. F.; Li, D. F.; Lu, W. Q.; Yi, G. F.
CS National Feed Engineering Technology Research Center, China Agricultural University, Beijing, Peop. Rep. China
SO Poultry Science (2003), 82(4), 657-663
CODEN: POSCAL; ISSN: 0032-5791
PB Poultry Science Association, Inc.
DT Journal
LA English
OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 32 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effect of pH and dose on the growth of gut bacteria on prebiotic carbohydrates in vitro
AB The effect of pH and substrate dose on the fermentation profile of a number of com.
prebiotics was analyzed in triplicate using stirred, pH and temperature controlled anaerobic batch culture fermns., inoculated with a fresh fecal slurry from one of three healthy volunteers. Bacterial nos. were enumerated using fluorescence in situ hybridization. The com. prebiotics investigated were fructooligosaccharides (FOS), inulin, galactooligosaccharides (GOS), isomaltooligosaccharides (IMO) and lactulose. Two pH values were investigated, i.e. pH 6 and 6.8. Doses of 1% and 2% (w/v) were investigated, equivalent to approx. 4 and 8 g per day, resp., in an adult diet. It was found that both pH and dose altered the bacterial composition It was observed that FOS and inulin demonstrated the greatest bifidogenic effect at pH 6.8 and 1% (w/v) carbohydrate, whereas GOS, IMO and lactulose demonstrated their greatest bifidogenic effect at pH 6 and 2% (w/v) carbohydrate. From this we can conclude that various prebiotics demonstrate differing bifidogenic effects at different conditions in vitro.
AN 2003:289460 HCAPLUS <<LOGINID::20100319>>
DN 139:229331
TI Effect of pH and dose on the growth of gut bacteria on prebiotic carbohydrates in vitro
AU Palframan, Richard J.; Gibson, Glenn R.; Rastall, Robert A.
CS School of Food Biosciences, Food Microbial Sciences Unit, The University of Reading, Reading, RG6 6AP, UK
SO Anaerobe (2003), Volume Date 2002, 8(5), 287-292
CODEN: ANAEF8; ISSN: 1075-9964
PB Elsevier Science Ltd.
DT Journal
LA English
OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 33 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of xylooligosaccharides on the growth of intestinal microflora
AB To investigate the effects of xylooligosaccharides on the in vitro growth of intestinal bacteria, various species were cultivated individually on the m-PYF medium containing a carbon source (0.5% w/v) such as xylooligosaccharides, isomaltooligosaccharides, fructooligosaccharides and sucrose, resp. The health-promoting microorganisms such as Bifidobacterium bifidum, Bifidobacterium infantis, Bifidobacterium longum, Lactobacillus casei and Lactobacillus acidophilus grew more effectively by xylooligosaccharides than by other carbon source, though xylooligosaccharides inhibited the growth of Clostridium perfringens, Bacteroides fragilis, Escherichia coli, Staphylococcus aureus and Salmonella typhimurium. At the mixed culture xylooligosaccharides exerted a preferential stimulatory effects on nos. of the health-promoting microorganisms, while xylooligosaccharides inhibited populations of potential pathogens at relatively low level. Xylooligosaccharides also maintained the acidity of culture with Streptococcus mutans, caries-inducing bacteria, over pH 5.0. These results suggest that xylooligosaccharides selectively promote the growth of the health-promoting microorganisms in human intestine and prevent caries by inhibiting acid production from Streptococcus mutans.
AN 2003:173157 HCAPLUS <<LOGINID::20100319>>
DN 138:300298
TI Effects of xylooligosaccharides on the growth of intestinal microflora
AU Rhew, Bo-Kyoung; Lee, Ji-Wan; Lee, Chang-Seung; Hyun, Seang-Il; Park, Youn-Je; Ahn, Jun-Bae; Yang, Chang-Kun; Yoon, Sewang
CS Department of Biotechnology, R&D Center, TS Corporation, Incheon, S. Korea
SO Han'guk Misaengmul-Saengmyongkong Hakhoechi (2002), 30(4), 380-387
CODEN: HMHAAS
PB Korean Society for Microbiology and Biotechnology
DT Journal
LA Korean
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 34 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of supplemental fructooligosaccharides plus mannanoligosaccharides on immune function and ileal and fecal microbial populations in adult dogs
AB Eight adult dogs surgically fitted with ileal cannulas were fed 200 g of dry, extruded, Kibble diet twice daily. At each feeding, the dogs were given 1 g sucrose (placebo) or 2 g fructooligosaccharides (FOS) plus 1 g mannooligosaccharides (MOS) in gelatin capsules. The fecal, ileal, and blood samples were collected at the end of each 14-day period to measure microbial populations and immune parameters. FOS + MOS increased the fecal bifidobacteria and fecal and ileal lactobacilli counts. Dogs fed FOS + MOS also tended to have lower blood neutrophil and greater blood lymphocyte counts vs. dogs given placebo. Blood serum, fecal, and ileal Ig concns. were unchanged by the treatments. FOS + MOS beneficially altered the indexes of gut health by improving the ileal and fecal microbial ecol. FOS + MOS also altered immune functions by causing a shift in blood immune cells.
AN 2002:904917 HCAPLUS <<LOGINID::20100319>>
DN 138:122013
TI Effects of supplemental fructooligosaccharides plus mannanoligosaccharides on immune function and ileal and fecal microbial populations in adult dogs
AU Swanson, Kelly S.; Grieshop, Christine M.; Flickinger, Elizabeth A.;

Healy, H.-P.; Dawson, K. A.; Merchen, N. R.; Fahey, George C., Jr.
CS Division of Nutritional Sciences, University of Illinois, Urbana, IL, 61801, USA
SO Archives of Animal Nutrition (2002), 56(4), 309-318
CODEN: AANUET; ISSN: 0003-942X
PB Taylor & Francis Ltd.
DT Journal
LA English
OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 35 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Prebiotic oligosaccharides: evaluation of biological activities and potential future developments
AB A review. Prebiotics are recognized for their ability to increase levels of 'health promoting' bacteria in the intestinal tract of humans or animals. This normally involves targeting the activities of bifidobacteria and/or lactobacilli. Non digestible oligosaccharides such as fructo-oligosaccharides, lactulose and traps-galacto-oligosaccharides seem to be efficacious prebiotics in that they confer the degree of selective fermentation required. Other oligomers are used as prebiotics in Japan e.g. xylo-oligosaccharides, soybean-oligosaccharides, isomalto-oligosaccharides. To determine prebiotic functionality, various in vitro systems may be used. These range from simple batch culture fermenters to complex models of the gastrointestinal tract. The definitive test however is an in vivo study. The advent of mol. based procedures in gut microbiol. has alleviated many concerns over the reliability of microbial characterization, in response to prebiotic intake. Techniques such as DNA probing and mol. fingerprinting are now being applied to both laboratory and human studies. These will help to further identify prebiotics that can be added to the diet and thereby fortify 'beneficial' bacteria. Such robust technologies can also be used in structure-function assays to identify the mechanisms behind prebiotic effects. Considerable research effort is currently being expended in developing so called 'second generation' prebiotics. These are forms that have multiple biol. activity that attempts health enhancement properties beyond the genus level stimulation of bifidobacteria or lactobacilli within the gut microbflora. Examples include higher mol. weight oligomers than is conventional for prebiotics, such that targeted activities in the distal colon are feasible (the left side of the human large gut being the frequent area for colonic disorder). Glycobiol. is also developing anti-adhesive prebiotics that incorporate receptor sites for common gut pathogens and/or their activities. Through the use of reverse enzyme technol., as applied to β-galactosidase activity in prebiotics, oligosaccharides that enhance a lactic microflora at the species, rather than genus, level are possible. This review gives an account of how second generation prebiotics may be manufactured, through a variety of biotechnol. techniques, and tested for their biol. activity. The health attributes of such mols. as well as existing prebiotics is also discussed, with reference to specific target populations. The prebiotic concept is a much more recent development in dietary intervention for enhanced gut function than is prebiotics. Not surprisingly therefore, research developments are proceeding quickly. Because oligosaccharides can be added to a wide variety of foodstuffs, new functional food developments are continuing. It is important that these are tested using reliable methodologies and that any health effects are underpinned by realistic mechanisms of effect.
AN 2002:783388 HCAPLUS <<LOGINID::20100319>>
DN 138:168911
TI Prebiotic oligosaccharides: evaluation of biological activities

and potential future developments
AU Rastall, Robert A.; Gibson, Glenn R.
CS Unit of Food Microbial Sciences, School of Food Biosciences, University of Reading, Reading, RG6 6AP, UK
SO Probiotics and Prebiotics (2002), 107-148. Editor(s): Tannock, Gerald W. Publisher: Caister Academic Press, Wymondham, UK. CODEN: 69DEL7; ISBN: 0-9542464-1-1
DT Conference; General Review
LA English
OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
RE.CNT 99 THERE ARE 99 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 36 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Preparation which contains sorbic acid and at least one nondigestible saccharide as a feed additive for livestock
AB A feed additive for livestock comprises sorbic acid at 10-90 and ≥1 nondigestible saccharide at 90-10 wt% of the additive. A probiotic microorganism may also be added to the feed.
AN 2002:591649 HCAPLUS <<LOGINID::20100319>>
DN 137:139887
TI Preparation which contains sorbic acid and at least one nondigestible saccharide as a feed additive for livestock
IN Raczek, Nico; Ter Meer, Hans-Ulrich
PA Nutrinova Nutrition Specialties & Food Ingredients Gmbh, Germany
SO Eur. Pat. Appl., 10 pp. CODEN: EPXXDW
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1228699	A1	20020807	EP 2002-1069	20020122 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	DE 10105305	A1	20020814	DE 2001-10105305	20010202 <--
	US 20020156046	A1	20021024	US 2002-56328	20020124 <--
	ZA 2002000726	A	20020802	ZA 2002-726	20020128 <--
	AU 2002014764	A	20020808	AU 2002-14764	20020201 <--
	JP 2002262779	A	20020917	JP 2002-25899	20020201 <--
PRAI	DE 2001-10105305	A	20010202 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 37 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of supplemental fructooligosaccharides and mannanoligosaccharides on colonic microbial populations, immune function and fecal odor components in the canine
AB Dietary mannooligosaccharide (MOS) supplementation had pos. influence on intestinal microbial populations in dogs by decreasing the total aerobic counts. Fructooligosaccharide (FOS) supplementation decreased the concns. of selected protein catabolites formed in the large bowel of dogs. The combination of FOS + MOS decreased the concns. of putrefactive compds. found in feces. The tendency for increased blood serum IgA and lymphocyte concns. could result in enhanced systemic immune characteristics in dogs supplemented with MOS and FOS + MOS.
AN 2002:466937 HCAPLUS <<LOGINID::20100319>>
DN 138:72516

TI Effects of supplemental fructooligosaccharides and mannanoligosaccharides on colonic microbial populations, immune function and fecal odor components in the canine
AU Swanson, Kelly S.; Grieshop, Christine M.; Flickinger, Elizabeth A.; Merchen, Neal R.; Fahey, George C., Jr.
CS Division of Nutritional Sciences, University of Illinois, Urbana, IL, USA
SO Journal of Nutrition (2002), 132(6S-2), 1717S-1719S
CODEN: JONUAI; ISSN: 0022-3166
PB American Society for Nutritional Sciences
DT Journal
LA English
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 38 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Production of short-chain fatty acids and gas from various oligosaccharides by gut microbes of carp (Cyprinus carpio L.) in micro-scale batch culture
AB We studied the metabolism of various oligosaccharides by carp (Cyprinus carpio) hindgut microbes by measuring gas productivity and organic acid production in gut contents using a 50-μl-scale batch culture system. Carp hindgut contents were incubated with 500 μg each of raffinose, lactosucrose, kestose, lactulose, gentiobiose, 4'-galactosyllactose and 6'-galactosyllactose and soybean-, xylo-, and isomalto -oligosaccharides or none (blank culture) at 25 °C for 6 h. The time-course of gas release from the culture (Y μl/culture) was expressed as an exponential function of incubation time (t) [Y=A+B+(1-e-kt)]; A, B and k are consts. Potential production of gas (A+B) from soybean-oligosaccharide and raffinose was larger than for the other saccharides except for kestose, and blank culture. The rate constant of gas (k) for lactosucrose was larger than that for isomalto- and xylo-oligosaccharide, lactulose, kestose or blank culture. Net production of total SCFA (sum of acetic, propionic and n-butyric acid wts.) from cultures with soybean- and isomalto-oligosaccharides, raffinose, gentiobiose and lactosucrose was greater than that from blank culture. These results suggested that soybean-oligosaccharide and raffinose were potentially highly fermentable oligosaccharides for carp hindgut microbes. Chemical structures of oligosaccharides seem to play an important role in the fermentability. It is also likely that oligosaccharide utilization differs between mammals and teleosts.
AN 2002:383673 HCAPLUS <<LOGINID::20100319>>
DN 137:165975
TI Production of short-chain fatty acids and gas from various oligosaccharides by gut microbes of carp (Cyprinus carpio L.) in micro-scale batch culture
AU Kihara, Minoru; Sakata, Takashi
CS Central Research Institute, Maruha Corporation, Tsukuba, 300-4295, Japan
SO Comparative Biochemistry and Physiology, Part A: Molecular & Integrative Physiology (2002), 132A(2), 333-340
CODEN: CBPAB5; ISSN: 1095-6433
PB Elsevier Science Inc.
DT Journal
LA English
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 39 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI A comparative in vitro evaluation of the fermentation properties of prebiotic oligosaccharides

AB Comparison of in vitro fermentation properties of com. prebiotic oligosaccharides. Populations of predominant gut bacterial groups were monitored over 24 h of batch culture through fluorescent in-situ hybridization. Short-chain fatty acid and gas production were also measured. All prebiotics increased the nos. of bifidobacteria and most decreased clostridia. Xylo-oligosaccharides and lactulose produced the highest increases in nos. of bifidobacteria while fructo-oligosaccharides produced the highest populations of lactobacilli. Galacto-oligosaccharides (GOS) resulted in the largest decreases in nos. of clostridia. Short-chain fatty acid generation was highest on lactulose and GOS. Gas production was lowest on isomalto-oligosaccharides and highest on inulin. The oligosaccharides differed in their fermentation characteristics. Isomalto-oligosaccharides and GOS were effective at increasing nos. of bifidobacteria and lactate while generating the least gas. The study provides comparative data on the properties of com. prebiotics, allowing targeting of dietary intervention for particular applications and blending of oligosaccharides to enhance overall functionality.
AN 2001:921704 HCAPLUS <<LOGINID::20100319>>
DN 136:339904
TI A comparative in vitro evaluation of the fermentation properties of prebiotic oligosaccharides
AU Rycroft, C. E.; Jones, M. R.; Gibson, G. R.; Rastall, R. A.
CS Food Microbial Sciences Unit, School of Food Biosciences, The University of Reading, Reading, RG6 6AP, UK
SO Journal of Applied Microbiology (2001), 91(5), 878-887
CODEN: JAMIFK; ISSN: 1364-5072
PB Blackwell Science Ltd.
DT Journal
LA English
OSC.G 123 THERE ARE 123 CAPLUS RECORDS THAT CITE THIS RECORD (123 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 40 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of hen age, Bio-Mos, and Flavomycin on poult susceptibility to oral Escherichia coli challenge
AB The effects of hen age, Escherichia coli, and dietary Bio-Mos and Flavomycin on poult performance from 1 to 21 d were studied. Day-of-hatch BUTA (BIG-6) male poults were gavaged orally (1 mL) with approx. 108 cfu/mL E. coli composed of 4 serotypes or sterile carrier broth. A mixture of the same E. coli cultures was added to the poults' water troughs to attain a concentration of approx. 106 cfu/mL on a weekly basis to ensure a continuous bacterial challenge. Within each E. coli split plot treatment group, poults from hens of different ages (33 and 58 wk of age) were fed diets containing Bio-Mos (1 g/kg feed), Flavomycin (2.2 mg active ingredient/kg feed), Bio-Mos plus Flavomycin, or a control diet, in a randomized complete block design. This experiment yielded 8 treatments per challenge group. At Weeks 1 and 3, 8 birds from each treatment from the E. coli challenged and unchallenged groups were randomly chosen for bacterial sampling of liver and intestinal tissue for coliforms, aerobic bacteria, and Lactobacillus spp. E. coli isolates from tissue samples were O serotyped. During E. coli challenge, dietary Bio-Mos and Flavomycin improved poult BW and BW gains ($P \leq 0.05$). When poults were not challenged with E. coli, poults from old hens had improved BW and cumulative BW gains over poults from young hens ($P \leq 0.05$). Cumulative 3-wk BW gains for unchallenged poults from young hens were improved by Bio-Mos and Flavomycin ($P \leq 0.05$) alone and in combination when compared to the control diet. Two of the 4 E. coli serotypes administered were recovered. Several serotypes were recovered that were not administered. It may be concluded that dietary

Bio-Mos and Flavomycin can improve the overall performance of poults, especially when they are faced with an E. coli challenge.
AN 2001:896680 HCAPLUS <<LOGINID::20100319>>
DN 136:183093
TI Effects of hen age, Bio-Mos, and Flavomycin on poult susceptibility to oral Escherichia coli challenge
AU Fairchild, A. S.; Grimes, J. L.; Jones, F. T.; Wineland, M. J.; Edens, F. W.; Sefton, A. E.
CS Department of Poultry Science, North Carolina State University, Raleigh, NC, 27695, USA
SO Poultry Science (2001), 80(5), 562-571
CODEN: POSCAL; ISSN: 0032-5791
PB Poultry Science Association, Inc.
DT Journal
LA English
OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 41 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Use of mannooligosaccharides from coffee mannan by intestinal bacteria
AB A mannooligosaccharide mixture was obtained by hydrolysis of spent coffee grounds. Furthermore, β-1,4-D-mannobiose, β-1,4-D-mannotriose, β-1,4-D-mannotetraose, and β-1,4-D-mannopentose were fractionated by active carbon chromatog. from this mixture Each mannooligosaccharide were investigated for its effect on the growth of established enterobacterial strains. Regardless of the mannooligosaccharide mol. weight, all mannooligosaccharides were used by Bifidobacterium adolescentis, Lactobacillus acidophilus, and Lactobacillus gasseri. On the other hand, bad bacteria such as Clostridium perfringens and Escherichia coli that produce mutagenic substances could not use mannooligosaccharides. Therefore it could be expected that mannooligosaccharides had a potential to promote the improvement of healthful human intestinal microflora as prebiotics.
AN 2001:846732 HCAPLUS <<LOGINID::20100319>>
DN 136:308984
TI Use of mannooligosaccharides from coffee mannan by intestinal bacteria
AU Asano, Ichiro; Nakamura, Yasuyuki; Hoshino, Hiromitsu; Aoki, Keiji; Fujii, Shigeyoshi; Imura, Naoto; Iino, Hisakazu
CS Central Research Laboratories, Ajinomoto General Foods Inc., Suzuka, Mie, 513-8632, Japan
SO Nippon Nogei Kagaku Kaishi (2001), 75(10), 1077-1083
CODEN: NNKKAA; ISSN: 0002-1407
PB Nippon Nogei Kagakkai
DT Journal
LA Japanese
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L11 ANSWER 42 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Hypoglycemic food containing carbohydrate-degrading enzymes, oligosaccharides, and dietary fibers
AB The foods contain carbohydrate-degrading enzymes produced by coculturing lactic acid bacteria with yeast, oligosaccharides which promote proliferation of intestinal bacteria, and dietary fibers. Ripened tomato, apple, cucumber, Japanese radish, and sugarcane(or sweet potato) were milled with H2O and the juice was treated with cellulase at 35° for 10 h. The juice was heated at

121° for 20 min, dried, and milled to give dietary fiber powder. The powder 30, oligosaccharides (fructooligosaccharide 20, isomaltooligosaccharides 20, galactooligosaccharides 20, palatinose 20, and coupling sugar 20%) 30, and carbohydrate-degrading enzymes were mixed to give hypoglycemic food. Hypoglycemic effect of the food was also tested using 25-55-old-year male and female volunteers.

AN 2001:785815 HCAPLUS <<LOGINID::20100319>>
DN 135:330756
TI Hypoglycemic food containing carbohydrate-degrading enzymes, oligosaccharides, and dietary fibers
IN Yanagida, Toji; Sano, Kunio
PA Energic K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001299276	A	20011030	JP 2000-119870	20000420 <--
PRAI JP 2000-119870		20000420 <--		

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 43 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Mannooligosaccharide for manufacturing probiotic bacteria growth promoter and anticariogenic food
AB The mannooligosaccharide is prepared from mannan obtained from coffee bean dreg and lees by hydrolysis with e.g. an acid. It contains 1-10 mannose residues as main ingredient, and glucose and galactose as minor ingredient. It is useful for manufacturing growth promoter for probiotic bacteria, and low-calorie and anticariogenic food.
AN 2001:406070 HCAPLUS <<LOGINID::20100319>>
DN 134:366094
TI Mannooligosaccharide for manufacturing probiotic bacteria growth promoter and anticariogenic food
IN Fujii, Shigeyoshi; Aoki, Takashi; Hoshino, Hiromitsu; Nakamura, Yasuyuki; Hamaguchi, Kengo; Asano, Ichiro; Imura, Naoto; Umemura, Masao
PA Ajinomoto General Foods, Inc., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001149041	A	20010605	JP 2000-279883	20000914 <--
JP 3553866	B2	20040811		
JP 2004159659	A	20040610	JP 2003-416763	20031215 <--
PRAI JP 1999-260185	A	19990914 <--		
JP 2000-279883	A3	20000914 <--		

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L11 ANSWER 44 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Active Bifidobacterium capsules
AB The capsules are manufactured by mixing isomaltose oligomer 500-700, Bifidobacterium powder 10-100, and bifidobacteria growth enhancer fructose oligomer 200-490 kg, and filling the mixture in capsules. The addition of fructooligosaccharide enhances the shelf life of the Bifidobacterium. The capsules can be used in food, medicine, and health-care products.
AN 2001:192713 HCAPLUS <<LOGINID::20100319>>

DN 134:207005
TI Active Bifidobacterium capsules
IN Fan, Zhaowu; Luo, Chengyang; Wei, Baoliang; Cong, Lin; Zhang, Xiaoguang
PA Nongken Institute of Dairy Products, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1266688	A	20000920	CN 1999-112738	19990310 <--
	CN 1151798	C	20040602		
PRAI	CN 1999-112738		19990310 <--		

L11 ANSWER 45 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Intestinal microflora is improved by the feeding of an oligosaccharide containing soft drink in rats
AB The intestinal microflora in rats fed an oligosaccharide containing soft drink was examined according to the method for the evaluation of the functionality of health food declared by the Department of Health, Taiwan. Thirty six Sprague-Dawley male rats, 6 wk old, were randomly assigned to one of the following three groups: Oligo, Mix and Control. They were all fed ad libitum the AIN-76 diet. In addition, they were fed resp. with 25 mL/day/rat of Oligo Drink which provided 0.52 g of isomaltooligosaccharides and 0.17 g of galactooligosaccharides, a control drink which was free of oligosaccharide and a "Mixed" drink which was made by mixing up equal amts. of Oligo" and the control drink. The cecal microflora were examined after 5.apprx.6 wk of feeding. Rats of the Oligo group showed significantly higher counts of Lactobacillus spp. ($p < 0.05$), but significantly lower counts of Clostridium perfringens ($p < 0.05$), than those in the control group. The count for cecal Lactobacillus spp. of the Mix group were also significantly higher than those in the control group ($p<0.05$), but significantly lower than those in the Oligo group ($p<0.05$). The counts of cecal Clostridium perfringens in the Mix group was not significantly different from that in the control group ($p > 0.05$). The results indicated that the oligosaccharide-containing soft drink could improve the intestinal microflora in this rat model.
AN 2001:47168 HCAPLUS <<LOGINID::20100319>>
DN 134:221948
TI Intestinal microflora is improved by the feeding of an oligosaccharide containing soft drink in rats
AU Cheng, Ai-Ling; Pan, Tzu-Ming; Hung, Hui-Ping; Huang, Ching-Jang
CS Dep. Agricultural Chem., National Taiwan Univ., Taipei, Taiwan
SO Zhonghua Minguo Yingyang Xuehui Zazhi (2000), 25(4), 232-242
CODEN: ZMYZEG; ISSN: 1011-6958
PB Nutrition Society in Taipei
DT Journal
LA Chinese
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 46 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Bakery products comprising live lyophilised lactic bacteria
AB The present invention relates to a functional food/health food in the form of a baked good comprising a non-baked fat-based composition and a baked part, characterized in that the fat-based composition is essentially water-free and comprises live lyophilized lactic acid bacteria and in that the baked part comprises one or more non-digestible fiber-like substances. Also provided are intermediates thereof, a method for its production and its use.

AN 2000:420742 HCAPLUS <<LOGINID::20100319>>
DN 133:30020
TI Bakery products comprising live lyophilised lactic bacteria
IN La Droitte, Philippe; De Simone, Claudio
PA Novartis Nutrition A.-G., Switz.; Mendes S.r.l.; Actial Farmaceutica Lda.
SO Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 1010372	A2	20000621	EP 1999-124758	19991213	<--
	EP 1010372	A3	20030903			
	EP 1010372	B1	20070905			
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, AL, MK					
	IT 98MI2692	A1	20000615	IT 1998-MI2692	19981215	<--
	IT 1304170	B1	20010308			
	AU 721430	B1	20000706	AU 1999-64420	19991209	<--
	ZA 9907630	A	20000615	ZA 1999-7630	19991213	<--
	AT 372058	T	20070915	AT 1999-124758	19991213	<--
	PT 1010372	E	20071031	PT 1999-124758	19991213	<--
	ES 2293706	T3	20080316	ES 1999-124758	19991213	<--
	CA 2292325	C	20090901	CA 1999-2292325	19991213	<--
	JP 2000175615	A	20000627	JP 1999-353892	19991214	<--
	KR 2000048129	A	20000725	KR 1999-57460	19991214	<--
	US 20020044990	A1	20020418	US 1999-461602	19991215	<--
	US 6544568	B2	20030408			
	CN 1271936	C	20060830	CN 1999-127829	19991215	<--
	HK 1029898	A1	20070202	HK 2001-100922	20010209	<--
PRAI	IT 1998-MI2692	A	19981215	<--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 47 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Studies on the development of functional oligosaccharides using amylases and related enzymes
AB A review with 25 refs. This paper is composed of the following four research topics, with research carried out at the Osaka Municipal Tech. Research Institute. Cyclodextrin glycosyltransferases (CGTases) from Bacillus megaterium, B. circulans, B. macerans and B. stearothermophilus were purified and their catalytic properties were studied. CGTase catalyzed the conversion of α-1,4-glucans such as starch and glycogen to cyclodextrin (CD) by intramol. transglycosylation. In the presence of a suitable acceptor such as glucose, CGTase catalyzed the intermol. transglycosylation, in which the non-reducing end glycosyl residues produced by splitting an α-1,4-glucan were transferred to the acceptor. In the intramol. transglycosylation, the enzymes from B. megaterium, B. circulans, B. macerans and B. stearothermophilus produced α-, β- and γ-CDs in ratios of 1.0:6.3:1.3, 1.0:6.4:1.4, 5.7:1.0:0.4 and 1.7:1.0:0.3, resp., on 1% soluble starch at the initial reaction. B. stearothermophilus CGTase showed the strongest activity in the intermol. transglycosylation. The effective acceptors of CGTases in the intermol. transglycosylation were D-glucose, D-xylose, 6-deoxy-D-glucose and L-sorbose, which had a pyranose structure with free equatorial hydroxyl groups at C2, C3 and C4. CGTases transferred glycosyl residues preferentially to the C4-hydroxyl group of D-glucose, D-xylose, and 6-deoxy-D-glucose with the exception of L-sorbose, where the preferred

group was the C3-hydroxyl group. The enzyme also catalyzed the hydrolysis of α-1,4-glucans and CDs. The ratios of hydrolysis to total catalysis were 1.9, 2.0, 2.0 and 8.3 for the CGTases from B. megaterium, B. circulans, B. macerans and B. stearothermophilus, resp. Using the intermol. transglycosylation of CGTase, maltooligosyl-sucrose ("coupling sugar," com. name) is produced from the mixture of starch hydrolyzates and sucrose. The cariogenicity of the coupling sugar was studied by a group of the Department of Dental Research, Japanese National Institute of Health, and other universities, and the coupling sugar was proved to be an anticariogenic sweetener. It was the first example of a so-called "functional oligosaccharide" which had a physiol. property apart from the conventional functions of sweeteners. Arthrobacter sp. K-1 β-fructofuranosidase (β-FFase), isolated from soil, had very strong transfer activity and broad acceptor specificity. When the β-FFase was incubated with sucrose in the presence of xylose, isomaltose and lactose, the enzyme transferred the fructosyl residue only to the C1 hydroxyl group of the acceptors and efficiently produced fructosylxyloside (XF), isomaltosylfructoside (IMF) and lactosylfructoside (LacF), resp. XF competitively inhibited the degradation activity of sucrose by glucosyltransferase (GTase) from Streptococcus mutans as an analog to sucrose, and IMF acted as an alternative acceptor for the glucosyl transfer reaction of GTase to lessen the formation of insol. glucan. These saccharides had anticariogenic properties. LacF was nondigestive, but selectively utilized by bifidobacteria in the human intestinal bacteria flora, followed by the improvement of constipation and blood lipid levels of hyperlipemia patients and suppression of putrefactive metabolites such as ammonia, phenol and in dole. Stevioside, a sweet steviol glycoside isolated from the leaves of Ste via rebaudiana Bertoni, is about 140-fold as sweet as sucrose, but has a slightly bitter taste and aftertaste. To improve the quality of taste, various stevioside derivs. such as glycosyl-stevioside (G-Ste), fructosyl-stevioside (F-Ste) and galactosyl-stevioside were synthesized with the transfer reaction of CGTase, β-FFase and β--galactosidase. The quality of taste of F-Ste was greatly improved, and much superior to that of rebaudioside A, which was the best sweet component of natural steviol sweeteners, and comparable to that of aspartame. To develop new applications different from CDs and branched CDs which are homogeneous oligosaccharides composed of only glucose, various heterobranched CDs were synthesized, β-Galactosidases synthesized galactosyl transfer products to branched CDs, but not CDs. Coffee bean α-galactosidase synthesized galactosyl transfer products to both CDs and branched CDs. Jack bean α-mannosidase produced mannosyl-CDs by reverse reaction with mannose and CDs. Jack bean N-acetyl-hexosaminidase produced N-acetylglucosaminyl-CDs by reverse reaction with N-acetylglucosamine and CDs.

AN 2000:375208 HCAPLUS <<LOGINID::20100319>>
DN 133:349165
TI Studies on the development of functional oligosaccharides using amylases and related enzymes
AU Kitahata, Sumio
CS Osaka Municipal Tech. Res. Inst., 1-6-50, Morinomiya, Joto-ku, Osaka, 536-8553, Japan
SO Journal of Applied Glycoscience (2000), 47(1), 87-97
CODEN: JAGLFX; ISSN: 1344-7882
PB Japanese Society of Applied Glycoscience
DT Journal; General Review
LA Japanese
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 48 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Enzyme composition capable of forming an oligosaccharide in vivo, and

therapeutic use
AB Oligosaccharides having physiol. activities are synthesized in vivo in order to e.g. improve intestinal bacterial flora. An enzyme composition comprising an enzyme capable of forming an oligosaccharide having a physiol. activity in the living body and a method for forming an oligosaccharide having a physiol. activity in the living body are provided. The enzyme composition of the invention is useful in the prevention of adiposis and for suppressing blood sugar increases in diabetics.
AN 2000:12624 HCAPLUS <<LOGINID::20100319>>
DN 132:59177
TI Enzyme composition capable of forming an oligosaccharide in vivo, and therapeutic use
IN Kimura, Shigeki; Ogawa, Tomonari; Kariya, Kinya; Yanase, Hideshi
PA Amano Pharmaceutical Co., Ltd., Japan
SO Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 968719	A2	20000105	EP 1999-112794	19990702 <--
	EP 968719	A3	20030129		
	EP 968719	B1	20041229		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6042823	A	20000328	US 1999-340203	19990628 <--
	JP 2000325045	A	20001128	JP 1999-186101	19990630 <--
	JP 4039652	B2	20080130		
	TW 544313	B	20030801	TW 1999-88113712	19990811 <--
PRAI	JP 1998-204293	A	19980702	<--	
	JP 1999-71122	A	19990317	<--	
	JP 1999-186101	A	19990630	<--	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 49 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of β-amylase and transglucosidase on the qualities of red ginseng extract
AB In order to evaluate the qualities of red ginseng extract and decrease precipitate formation in ginseng drink, red ginseng extract was hydrolyzed with β-amylase and transglucosidase. Isomaltose 5.2 % was produced as isomaltooligosaccharides and glucose content was increased in the enzyme treated ginseng extract Contents of ginsenoside R-b1 and R-b2 were decreased, whereas ginsenoside-Rd was increased by the enzyme treatments. The growth of 3 strains of Bifidus spp. and 4 strains of Lactobacillus spp., beneficial intestinal bacteria, were enhanced by adding of the enzymically hydrolyzed ginseng extract Sweetness and sourness were increased, however, bitterness and astringency were decreased in the hydrolyzed ginseng extract The formation of ppts. in hydrolyzed red ginseng extract of pH 3.0.apprx.4.5 were significantly decreased in the storage condition of 40° for 1 mo compared to that of control.
AN 1999:492639 HCAPLUS <<LOGINID::20100319>>
DN 131:355962
TI Effects of β-amylase and transglucosidase on the qualities of red ginseng extract
AU Kim, Na-Mi; Lee, Jong-Soo; Lee, Byung H.

CS Korean Ginseng and Tobacco Research Institute, Taejon, 305-345, S. Korea
SO Journal of Ginseng Research (1999), 23(2), 93-98
CODEN: JGREF7; ISSN: 1226-8453
PB Korean Society of Ginseng
DT Journal
LA Korean
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 50 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Probiotic-containing paste for use with bakery products
AB A probiotic-containing paste may be used as a filling, coating or other component of food products. Suitable food applications include bakery products, especially a rye bread, rusk, or biscuit. Thus, a cheese-flavored filling containing Streptococcus thermophilus is used with with a thin rye-based crispbread.
AN 1999:166496 HCAPLUS <<LOGINID::20100319>>
DN 130:209096
TI Probiotic-containing paste for use with bakery products
IN Haarasilta, Sampsa; Reinikainen, Tapani
PA Cultor Corporation, Finland
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9909839	A1	19990304	WO 1998-FI646	19980821 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FI 9703475	A	19990223	FI 1997-3475	19970822 <--
	FI 108512	B1	20020215		
	AU 9888650	A	19990316	AU 1998-88650	19980821 <--
PRAI	FI 1997-3475	A	19970822	<--	
	WO 1998-FI646	W	19980821	<--	

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 51 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Possibility of an effect of nondigestible carbohydrates on human intestinal flora.
AB A review with 116 refs. discussing prebiotics, probiotics, and synbiotics with respect to roughage in the diet. Fructooligosaccharides, lactose derivs., galacto-, malto-, isomalto-, xylo-, and gluco-oligosaccharides are discussed.
AN 1998:468620 HCAPLUS <<LOGINID::20100319>>
DN 129:229989
OREF 129:46793a,46796a
TI Possibility of an effect of nondigestible carbohydrates on human intestinal flora.
AU Karppinen, Sirpa; Aura, Anna-Marja; Forssell, pirkko; Ooutanen, Kaisa
CS Vtt Bio, Finland
SO VTT Tiedotteita (1998), 1896, 1-57
CODEN: VTIEEE; ISSN: 1235-0605

DT Report; General Review
LA Finnish

L11 ANSWER 52 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Frozen breads containing lactic acid bacteria
AB Title breads contain sporogenous lactic acid bacteria for improvement of intestinal environment. Bread containing Bacillus coagulans was compressed, stored in a freezer, and heated with a microwave oven. The resulting bread reduced fecal pH and amine and ammonia content.
AN 1998:210980 HCAPLUS <<LOGINID::20100319>>
DN 128:229668
OREF 128:45489a,45492a
TI Frozen breads containing lactic acid bacteria
IN Ara, Katsutoshi; Takigawa, Hirofumi; Mori, Hiroshi; Otsuji, Ichiya
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10084845	A	19980407	JP 1996-242856	19960913 <--
	JP 3699214	B2	20050928		
PRAI	JP 1996-242856		19960913 <--		

L11 ANSWER 53 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Enhancement of microbial colonization of the gastrointestinal tract
AB Probiotic compns. comprise one or more probiotic microorganisms, a carrier which will function to transport the one or more probiotic microorganisms to the large bowel or other regions of the gastrointestinal tract of an animal, the carrier comprising a modified or unmodified resistant starch or mixts. thereof, which carrier acts as a growth or maintenance medium for microorganisms in the large bowel or other regions of the gastrointestinal tract, and an oligosaccharide. PH values in cultures demonstrated synergistic effects of oligosaccharide (Hi-maize starch or raftilose) in probiotic compns. containing, e.g., Bifidobacteria.
AN 1997:640554 HCAPLUS <<LOGINID::20100319>>
DN 127:272805
OREF 127:53117a,53120a
TI Enhancement of microbial colonization of the gastrointestinal tract
IN Brown, Ian Lewis; Conway, Patricia Lynne; Topping, David Lloyd; Wang, Xin
PA University of New South Wales, Australia; Burns Philp & Co., Ltd.; Burns Philp Research & Development Pty. Ltd.; Commonwealth Scientific and Industrial Research Organisation; Arnott's Biscuits Ltd.; Gist-Brocades Australia Pty. Ltd.; Goodman Fielder Ingredients Ltd.; Brown, Ian Lewis; Conway, Patricia Lynne; et al.
SO PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9734615	A1	19970925	WO 1997-AU176	19970320 <--
	W: AU, CA, JP, KR, NZ, SG, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2249361	A1	19970925	CA 1997-2249361	19970320 <--
	CA 2249361	C	20081118		
	AU 9720182	A	19971010	AU 1997-20182	19970320 <--

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     AU 705095            B2    19990513
     EP 888118            A1    19990107    EP 1997-908078         19970320 <--
     EP 888118            B1    20041103
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     NZ 331950            A     20000228    NZ 1997-331950         19970320 <--
     JP 2000506870        T     20000606    JP 1997-532982         19970320 <--
     JP 4416841           B2    20100217
     AT 281174            T     20041115    AT 1997-908078         19970320 <--
     ES 2234002           T3    20050616    ES 1997-908078         19970320 <--
     US 6221350           B1    20010424    US 1999-155117         19990412 <--
     JP 2009137962        A     20090625    JP 2008-309759         20081204 <--
PRAI AU 1996-8813         A     19960320  <--
     JP 1997-532982       A3    19970320  <--
     WO 1997-AU176        W     19970320  <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   18     THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)
RE.CNT  3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11  ANSWER 54 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Production, health benefits and applications of galacto-oligosaccharides
AB   A review with 18 refs.  It is well known that bifidobacteria are useful
     inhabitants of the human intestine and that they are colonized there.
     These bacteria produce lactic acid, acetic acid and formic acid
     to lower the pH in the intestinal tract and thereby tend to
     prevent the growth of unfavorable organisms, such as Escherichia coli and
     Clostridium perfringens.  It was reported that some oligosaccharides, such
     as galacto-oligosaccharides, fructo-oligosaccharides, isomalto
     -oligosaccharides, lactosucrose, have a growth promoting activity for
     bifidobacterium.  This chapter describes (1) the production processes for
     oligosaccharides, (2) the properties of oligosaccharides, (3) their
     physiol. features, including the bifidobacteria growth promoting effects
     and (4) applications in foods.
AN   1997:621412  HCAPLUS <<LOGINID::20100319>>
DN   127:261819
OREF 127:51145a,51148a
TI   Production, health benefits and applications of galacto-oligosaccharides
AU   Dombo, Munehiko; Yamamoto, Hideki; Nakajima, Hiroshi
CS   Unitika Ltd., Kyoto, Japan
SO   Frontiers in Foods and Food Ingredients (1997), 2(New
     Technologies for Healthy Foods & Nutraceuticals), 143-156
     CODEN: FFFIE9; ISSN: 1072-429X
PB   ATL Press
DT   Journal; General Review
LA   English
OSC.G   8      THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT  18     THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11  ANSWER 55 OF 64  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Synthesis by an α-glucosidase of glycosyl-trehaloses with an
     isomaltosyl residue
AB   Glycosyl trehaloses with an isomaltosyl residue were synthesized
     by α-glucosidase from Aspergillus niger by using maltotetraose as a
     glucosyl donor and trehalose as the acceptor.  The 1 trisaccharide and 2
     tetrasaccharides formed were isolated by successive column chromatog.  The
     results of enzymic digestion, methylation anal., and 13C-NMR studies
     indicated that these oligosaccharides were α- isomaltosyl
     α-glucoside, α- isomaltotriosyl α-glucoside,
     and α- isomaltosyl α- isomaltoside.  These
```

oligosaccharides were not fermented to an acid by Streptococcus mutans and they effectively inhibited water-insol. glucan synthesis from sucrose by glucosyltransferase. In an in vitro utilization test with human intestinal bacteria, these oligosaccharides were predominantly utilized by Bifidobacteria.
AN 1997:308881 HCAPLUS <<LOGINID::20100319>>
DN 127:16515
OREF 127:3351a,3354a
TI Synthesis by an α-glucosidase of glycosyl-trehaloses with an isomaltosyl residue
AU Kurimoto, Masashi; Nishimoto, Tomoyuki; Nakada, Tetsuya; Chaen, Hiroto; Fukuda, Shigeharu; Tsujisaka, Yoshio
CS Hayashibara Biochemical Laboratories, Inc., Okayama, 700, Japan
SO Bioscience, Biotechnology, and Biochemistry (1997), 61(4), 699-703
CODEN: BBBIEJ; ISSN: 0916-8451
PB Japan Society for Bioscience, Biotechnology, and Agrochemistry
DT Journal
LA English
OSC.G 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 56 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of biosynthetic polysaccharides and oligosaccharides on intestinal bacteria
AB The growth and pH changes of intestinal bacteria utilizing indigestible biosynthetic polysaccharides (pine fiber, polydextrose) or oligosaccharides (fructooligosaccharides, isomaltooligosaccharides, soybean oligosaccharides) were investigated. Six intestinal bacteria strains were cultured anaerobically at 37° in a medium which contained different indigestible polysaccharides or oligosaccharides. The changes of optical d. at 560 nm and pH values in the medium were examined Bifidobacterium bifidum and Bifidobacterium longum utilized soybean oligosaccharides, isomaltooligosaccharides, and fructooligosaccharides and produced more acids than on the other indigestible carbohydrates. Lactobacillus acidophilus, Enterococcus faecalis, and Escherichia coli grew well on soybean oligosaccharides, isomaltooligosaccharides, or fructooligosaccharides and produced significant amts. of acids, but grew poorly in pine fiber and polydextrose media and changes of pH were not observed Bacteroides fragilis grew very well in soybean oligosaccharides and isomaltooligosaccharides and produced much acid. B. fragilis utilized pine fiber and polydextrose poorly.
AN 1995:281446 HCAPLUS <<LOGINID::20100319>>
DN 122:51001
OREF 122:9757a,9760a
TI Effects of biosynthetic polysaccharides and oligosaccharides on intestinal bacteria
AU Yang, Yaching; Tsiang, Fonglin; Chiu, Chihwei P.; Tsai, Chingmin E.
CS Graduate Institute of Nutrition and Food Sciences, Fujen University, Taipei, Taiwan
SO Shipin Kexue (Taipei) (1993), 20(2), 187-97
CODEN: SPKHE6; ISSN: 0253-8997
PB Chinese Institute of Food Science
DT Journal
LA Chinese

L11 ANSWER 57 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of biosynthetic oligo- and polysaccharides on the growth of intestinal bacteria

AB This study investigated the effects of some com. products of biosynthetic indigestible saccharides on the growth and acid production of 5 intestinal bacteria. Bifidobacterium longum, Enterococcus faecalis, Klebsiella pneumoniae, Escherichia coli and Bacteroides fragilis were mixed and cultured anaerobically at 37° for 48 h in test media which contained 0.5% fructooligosaccharide-1, fructooligosaccharide-2, isomaltooligosaccharide, galactooligosaccharide, polydextrose or Pine fiber. The pH values and total bacterial count of media after anaerobic culture at 37° for 48 h were examined The results showed that 0.5% glucose, isomaltooligosaccharide and fructooligosaccharide-3 gave the lowest pH value, but still higher than pH 4.5. Polydextrose and Pine fiber gave the highest pH value, about pH 6.5. K. pneumoniae and E. coli grew well in all test media and PY broth (basal medium). The bacterial counts of E. faecalis in galactooligosaccharide or 0.25% glucose were less than in other test media. B. longum grew better in fructooligosaccharide-1 or galactooligosaccharide. B. fragilis significantly decreased in galactooligosaccharide medium; however, it did not change in other test media or PY broth.
AN 1995:184720 HCAPLUS <<LOGINID::20100319>>
DN 122:27415
OREF 122:5337a,5340a
TI Effects of biosynthetic oligo- and polysaccharides on the growth of intestinal bacteria
AU Liu, Shoufen; Ling, Yinshey; Tsai, Chingmin E.
CS Graduate Institute of Nutrition and Food Sciences, Fujen University, Taipei, Taiwan
SO Shipin Kexue (Taipei, Taiwan) (1994), 21(2), 134-43
CODEN: SPKHE6; ISSN: 0253-8997
DT Journal
LA Chinese

L11 ANSWER 58 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Vinegar containing branched oligosaccharides
AB Vinegar, which improves intestinal flora, contains alc.-fermentation and AcOH-fermentation products of branched oligosaccharide-containing sugars. Vinegar (having sugar composition of glucose 0, maltose 1.1, isomaltose 4.1, maltotriose 0.9, panose 3.0, isomaltotriose 2.3, and other branched oligosaccharides 20.7 g/100 mL) was given orally to men (at 30 mL/day) for 2 wk to show 34.9% Bifidobacterium ratio to total intestinal bacteria, vs. 21.8%, before the treatment.
AN 1994:481500 HCAPLUS <<LOGINID::20100319>>
DN 121:81500
OREF 121:14635a,14638a
TI Vinegar containing branched oligosaccharides
IN Kimura, Takanao; Hirooka, Shoichi
PA Gunei Kagaku Kogyo Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06090733	A	19940405	JP 1992-272330	19920914 <--
PRAI	JP 1992-272330		19920914 <--		

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 59 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Structure of dextran synthesized by dextrin dextranase from Acetobacter capsulatus ATCC 11894

AB The structure of dextran synthesized from maltotetraose by dextrin dextranase (EC 2.4.1.2) from Acetobacter capsulatus ATCC 11894 was analyzed. When the Acetobacter dextran (AD) was acetolyzed, glucose and maltose were produced. AD was allowed to react with α-amylases. AD was digested by bacterial saccharifying α-amylase and bacterial liquefying α-amylase, and glucose, maltose, and maltotriose were produced. The structure of the fraction obtained from dextranase-digested AD by activated charcoal chromatog., which did not contain glucose, isomaltose, and isomaltotriose, was investigated by methylation anal., and the ratio of 2,3,4,6-tetra-O-methyl-:2,3,4-tri-O-methyl-:2,3,6-tri-O-methyl-:2,3-di-O-methyl-alditol acetate was estimated as 22.9:46.8:15.5:14.8. This result indicated the existence of α-1,4 branches and that of α-1,4 linkages in α-1,6 glucosyl linear chains. Native AD was calculated to be constructed with 6.23 branching points and 6.53 α-1,4 linked glucosyl residues per 100 glucosyl units. Though AD was digested slightly by rat intestinal acetone powder, high mol. weight polymers remained. Therefore AD could be used as a dietary fiber.
AN 1994:3374 HCAPLUS <<LOGINID::20100319>>
DN 120:3374
OREF 120:783a,786a
TI Structure of dextran synthesized by dextrin dextranase from Acetobacter capsulatus ATCC 11894
AU Yamamoto, Kuzuya; Yoshikawa, Kenji; Okada, Shigetaka
CS Biochem. Res. Lab., Ezaki Glico Co., Ltd., Osaka, 555, Japan
SO Bioscience, Biotechnology, and Biochemistry (1993), 57(9), 1450-3
CODEN: BBBIEJ; ISSN: 0916-8451
DT Journal
LA English
OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L11 ANSWER 60 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Substrates and lactic acid bacteria
AB A review with 31 refs. For the multiplication of bifidobacteria in the human intestine, dietary sugar sources are the main factors that one can influence. For example, the administration of nondigestible oligosaccharides, such as raffinose, fructooligosaccharides, galactosyllactose, isomaltooligosaccharides, or transgalactosyl oligosaccharide, causes an increase in the number of endogenous bifidobacteria and some changes in lactic acid bacteria. However, the relationship between the changes and the dose of the oligosaccharides is not clear. In order to increase the number of lactic acid bacteria, and especially bifidobacteria, in the intestinal tract, suitable slowly absorbable substrates are needed in the diet. The production of lactic acid and other organic acids by lactic acid bacteria as well as bifidobacteria is dependent on metabolism of carbohydrate substrates which have not been absorbed or metabolized in the upper digestive tract before reaching the large intestine or the colon.
AN 1993:555629 HCAPLUS <<LOGINID::20100319>>
DN 119:155629
OREF 119:27769a,27772a
TI Substrates and lactic acid bacteria
AU Salminen, Seppo; Ramos, Patricia; Fonden, Rangne
CS Valio Ltd., Helsinki, Finland
SO Food Science and Technology (New York, NY, United States) (1993), 58(Lactic Acid Bacteria), 295-306
CODEN: FSTEEM; ISSN: 0891-8961
DT Journal; General Review
LA English

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L11 ANSWER 61 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI In vitro digestion and utilization of theanderose by various intestinal bacteria
AB The hydrolysis of theanderose, 6G-α-D-glucosylsucrose, was examined by an in vitro digestion method. No hydrolysis was observed using salivary and pancreatic amylases. Theandrose was partially (3.7%) hydrolyzed by artificial gastric juice. Enzymes of the small intestine hydrolyzed 58.2% of the theanderose, producing fructose, glucose, and sucrose. Apparently, theanderose is partially hydrolyzed between the mouth and small intestine, and the residue enters the large intestine. The utilization of theanderose by various intestinal bacteria in vitro was investigated. Theanderose was utilized by all Bifidobacterium species except for B. bifidum, but was not utilized by Clostridium and Escherichia. Furthermore the utilization of theanderose by Bifidobacterium was higher than fructooligosaccharide (FOS), and the selectivity of Bifidobacterium was higher for theanderose than for isomaltose and FOS. These results suggest that intake of theanderose selectively promotes the growth of intestinal bifidobacteria.
AN 1993:190262 HCAPLUS <<LOGINID::20100319>>
DN 118:190262
OREF 118:32663a,32666a
TI In vitro digestion and utilization of theanderose by various intestinal bacteria
AU Shimokawa, Hisatoshi; Takeda, Yasuhiko; Wada, Kouichi; Shimizu, Toshio
CS Foods Div., Asahi Chem. Ind. Co., Ltd., Fuji, 416, Japan
SO Nippon Eiyo, Shokuryo Gakkaishi (1993), 46(1), 69-76
CODEN: NESGDC; ISSN: 0287-3516
DT Journal
LA Japanese
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 62 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Intestinal function improvers containing Yucca and oligosaccharides
AB Intestinal function improvers contain Yucca and ≥1 oligosaccharides chosen from isomalto-, galacto-, and fructo-oligosaccharides. Yucca-isomaltooligosaccharide mixture (1:1 weight ratio) at 2 g/L synergistically enhanced growth of Lactobacillus brevis and Bifidobacterium breve.
AN 1992:172748 HCAPLUS <<LOGINID::20100319>>
DN 116:172748
OREF 116:29219a,29222a
TI Intestinal function improvers containing Yucca and oligosaccharides
IN Hasegawa, Masayasu; Kawada, Shigetoshi
PA Nippon Synthetic Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04016163	A	19920121	JP 1990-116637	19900502 <--
PRAI	JP 1990-116637		19900502 <--		

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 63 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN

TI An oligosaccharide product - containing composition and its use as a selective growth nutrient for enteric Bifidobacterium
AB The reduction products of branched oligosaccharides which possess α-1,6 glucose linkages are used to prepared a composition for selectively promoting the growth of enteric Bifidobacterium. A composition containing reduced branched oligosaccharide 40% [which was composed of isomaltose 25, trisaccharide (panose, isomaltotriose, etc) 10, and tetrasaccharide (or larger than tetrasaccharide) 5%] and other sugars (predominantly glucose and mannose) 60% demonstrated its selectivity on promoting the growth of B. breve but not E. coli or other undesirable bacteria (data given).
AN 1988:147082 HCAPLUS <<LOGINID::20100319>>
DN 108:147082
OREF 108:24079a
TI An oligosaccharide product - containing composition and its use as a selective growth nutrient for enteric Bifidobacterium
IN Kawamoto, Takanobu; Oda, Tsunero; Takaku, Hajime
PA Showa Sangyo Co., Ltd., Japan; Nikken Chemicals Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62145020	A	19870629	JP 1985-282730	19851218 <--
JP 07095943	B	19951018		

PRAI JP 1985-282730 19851218 <--
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 64 OF 64 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Bacterial lectins, cell-cell recognition and infectious disease
AB A review with 56 refs. Numerous bacterial strains produce surface lectins, commonly in the form of fimbria that are filamentous assemblies of protein subunits. Among the best characterized of these are the type 1 (mannose-specific) fimbrial lectins of Escherichia coli that consist almost exclusively of one class of subunit with a mol. mass of 17 kDa. They possess an extended combining site corresponding to a trisaccharide and preferentially bind carbohydrate units of oligomannose or hybrid type. Type 1 fimbria also possess a hydrophobic region close to the carbohydrate-binding site, since aromatic α-mannosides inhibit strongly (up to 1000 times more than Me α-mannoside) the agglutination of yeasts by the bacteria and adherence of the latter to pig ileal epithelial cells. The combining sites of type 1 fimbria of the salmonellae and of other enteric bacteria are different from those of E. coli in that they are smaller and do not possess a hydrophobic region. The various bacterial surface lectins appear to function primarily in the initiation of infection by mediating bacterial adherence to epithelial cells (e.g., in the urinary and gastrointestinal tracts). The mannose-specific lectins also act as recognition mols. in lectinophagocytosis (i.e., phagocytosis of the bacteria in the absence of opsonins) by mouse, rat, and human peritoneal macrophages, and human polymorphonuclear leukocytes. Affinity chromatog. of membrane lysates from human polymorphonuclear leukocytes on immobilized type 1 fimbrial lectin, using Me α-mannoside as eluent, showed that glycoproteins with apparent mol. masses of 70-80, 100, and 150 kDa acts as receptors for the bacteria. Inhibition expts. with monoclonal antibodies suggest that the glycoprotein bands of 100 and 150 kDa may be identical with the α and β subunits of leukocyte complement

receptors and adhesion glycoproteins involved in complement-mediated opsonophagocytosis. The systems described serve as a fine illustration for the biol. role of lectin-carbohydrate interactions.
AN 1987:473877 HCAPLUS <<LOGINID::20100319>>
DN 107:73877
OREF 107:12113a,12116a
TI Bacterial lectins, cell-cell recognition and infectious disease
AU Sharon, Nathan
CS Dep. Biophys., Weizmann Inst. Sci., Rehovot, 76100, Israel
SO FEBS Letters (1987), 217(2), 145-57
CODEN: FEBLAL; ISSN: 0014-5793
DT Journal; General Review
LA English
OSC.G 94 THERE ARE 94 CAPLUS RECORDS THAT CITE THIS RECORD (94 CITINGS)

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FULL ESTIMATED COST	202.42	221.95
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-53.55	-55.25

=> guar or galactomannan or (manno-oligosaccharide) or mannooligosaccharide or oligomannose or isomalto? or (iso-malto?)
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	208.24	227.77
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-53.55	-55.25

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DICTIONARY FILE UPDATES:  18 MAR 2010  HIGHEST RN 1211569-35-5

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=> exp proanthocyanidin/cn
E1            1     PROANSAMYCIN X/CN
E2            1     PROANTHANOL/CN
E3            0 --> PROANTHOCYANIDIN/CN
E4            1     PROANTHOCYANIDIN A/CN
E5            1     PROANTHOCYANIDIN A1/CN
E6            1     PROANTHOCYANIDIN A2/CN
E7            1     PROANTHOCYANIDIN A2 4A-BENZYLTHIOETHER/CN
E8            1     PROANTHOCYANIDIN A4/CN
E9            1     PROANTHOCYANIDIN A5'/CN
E10           1     PROANTHOCYANIDIN A6/CN
E11           1     PROANTHOCYANIDIN A7/CN
E12           1     PROANTHOCYANIDIN B/CN

=> exp proanthocyanidin A2/cn
E1            1     PROANTHOCYANIDIN A/CN
E2            1     PROANTHOCYANIDIN A1/CN
E3            1 --> PROANTHOCYANIDIN A2/CN
E4            1     PROANTHOCYANIDIN A2 4A-BENZYLTHIOETHER/CN
E5            1     PROANTHOCYANIDIN A4/CN
E6            1     PROANTHOCYANIDIN A5'/CN
E7            1     PROANTHOCYANIDIN A6/CN
E8            1     PROANTHOCYANIDIN A7/CN
E9            1     PROANTHOCYANIDIN B/CN
E10           1     PROANTHOCYANIDIN B1/CN
E11           1     PROANTHOCYANIDIN B2/CN
E12           1     PROANTHOCYANIDIN B2 3,3'-O-GALLATE/CN

=> s E1-E12
              1 "PROANTHOCYANIDIN A"/CN
              1 "PROANTHOCYANIDIN A1"/CN
              1 "PROANTHOCYANIDIN A2"/CN
              1 "PROANTHOCYANIDIN A2 4A-BENZYLTHIOETHER"/CN
              1 "PROANTHOCYANIDIN A4"/CN
              1 "PROANTHOCYANIDIN A5'"/CN
              1 "PROANTHOCYANIDIN A6"/CN
              1 "PROANTHOCYANIDIN A7"/CN
              1 "PROANTHOCYANIDIN B"/CN
              1 "PROANTHOCYANIDIN B1"/CN
              1 "PROANTHOCYANIDIN B2"/CN
              1 "PROANTHOCYANIDIN B2 3,3'-O-GALLATE"/CN
L12          12 ("PROANTHOCYANIDIN A"/CN OR "PROANTHOCYANIDIN A1"/CN OR "PROANTH
                OCYANIDIN A2"/CN OR "PROANTHOCYANIDIN A2 4A-BENZYLTHIOETHE
                R"/CN OR "PROANTHOCYANIDIN A4"/CN OR "PROANTHOCYANIDIN A5'"/CN
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                OR "PROANTHOCYANIDIN A6"/CN OR "PROANTHOCYANIDIN A7"/CN OR "PROA
                NTHOCYANIDIN B"/CN OR "PROANTHOCYANIDIN B1"/CN OR "PROANTHOCYANI
                DIN B2"/CN OR "PROANTHOCYANIDIN B2 3,3'-O-GALLATE"/CN)

=> exp proanthocyanidin B3/cn
E1            1     PROANTHOCYANIDIN B2/CN
E2            1     PROANTHOCYANIDIN B2 3,3'-O-GALLATE/CN
E3            1 --> PROANTHOCYANIDIN B3/CN
E4            1     PROANTHOCYANIDIN B4/CN
E5            1     PROANTHOCYANIDIN B5/CN
E6            1     PROANTHOCYANIDIN B6/CN
E7            1     PROANTHOCYANIDIN B7/CN
E8            1     PROANTHOCYANIDIN BP 1/CN
E9            1     PROANTHOCYANIDIN C/CN
E10           1     PROANTHOCYANIDIN C1/CN
E11           1     PROANTHOCYANIDIN CS 3/CN
E12           1     PROANTHOCYANIDIN CS 4/CN

=> s E3-E12
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              1 "PROANTHOCYANIDIN B4"/CN
              1 "PROANTHOCYANIDIN B5"/CN
              1 "PROANTHOCYANIDIN B6"/CN
              1 "PROANTHOCYANIDIN B7"/CN
              1 "PROANTHOCYANIDIN BP 1"/CN
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              1 "PROANTHOCYANIDIN CS 3"/CN
              1 "PROANTHOCYANIDIN CS 4"/CN
L13          10 ("PROANTHOCYANIDIN B3"/CN OR "PROANTHOCYANIDIN B4"/CN OR "PROANT
                HOCYANIDIN B5"/CN OR "PROANTHOCYANIDIN B6"/CN OR "PROANTHOCYANID
                IN B7"/CN OR "PROANTHOCYANIDIN BP 1"/CN OR "PROANTHOCYANIDIN
                C"/CN OR "PROANTHOCYANIDIN C1"/CN OR "PROANTHOCYANIDIN CS 3"/CN
                OR "PROANTHOCYANIDIN CS 4"/CN)

=> exp proanthocyanidin CT/cn
E1            1     PROANTHOCYANIDIN CS1/CN
E2            1     PROANTHOCYANIDIN CS2/CN
E3            0 --> PROANTHOCYANIDIN CT/CN
E4            1     PROANTHOCYANIDIN DIMER MONOGALLATE/CN
E5            1     PROANTHOCYANIDIN P-1/CN
E6            1     PROANTHOCYANIDIN PRECURSOR-SPECIFIC UDP-GLYCOSYLTRANSFERASE
                    (MEDICAGO TRUNCATULA)/CN
E7            1     PROANTHOCYANIDIN PZ5/CN
E8            1     PROANTHOCYANIDIN RP 1/CN
E9            1     PROANTHOCYANIDIN RP 2/CN
E10           1     PROANTHOCYANIDIN RP 3/CN
E11           1     PROANTHOCYANIDIN RP 4/CN
E12           1     PROANTHOCYANIDIN T1/CN

=> s E4-E12
              1 "PROANTHOCYANIDIN DIMER MONOGALLATE"/CN
              1 "PROANTHOCYANIDIN P-1"/CN
              1 "PROANTHOCYANIDIN PRECURSOR-SPECIFIC UDP-GLYCOSYLTRANSFERASE
                (MEDICAGO TRUNCATULA)"/CN
              1 "PROANTHOCYANIDIN PZ5"/CN
              1 "PROANTHOCYANIDIN RP 1"/CN
              1 "PROANTHOCYANIDIN RP 2"/CN
              1 "PROANTHOCYANIDIN RP 3"/CN
              1 "PROANTHOCYANIDIN RP 4"/CN
              1 "PROANTHOCYANIDIN T1"/CN
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L14          9 ("PROANTHOCYANIDIN DIMER MONOGALLATE"/CN OR "PROANTHOCYANIDIN
               P-1"/CN OR "PROANTHOCYANIDIN PRECURSOR-SPECIFIC UDP-GLYCOSYLTRAN
               SFERASE (MEDICAGO TRUNCATULA)"/CN OR "PROANTHOCYANIDIN PZ5"/CN
               OR "PROANTHOCYANIDIN RP 1"/CN OR "PROANTHOCYANIDIN RP 2"/CN OR
               "PROANTHOCYANIDIN RP 3"/CN OR "PROANTHOCYANIDIN RP 4"/CN OR "PRO
               ANTHOCYANIDIN T1"/CN)

=> exp proanthocyanidin T5/cn
E1           1     PROANTHOCYANIDIN T3/CN
E2           1     PROANTHOCYANIDIN T4/CN
E3           0 --> PROANTHOCYANIDIN T5/CN
E4           1     PROANTHOCYANIDIN TETRAMER/CN
E5           1     PROANTHOCYANIDINS/CN
E6           1     PROANTODIANISIDINE/CN
E7           1     PROAPIDAECIN IB/CN
E8           1     PROAPIGENINIDIN/CN
E9           1     PROAPOLIPOPROTEIN A-I (HUMAN CLONE PNIV 1602 GENE APOA1 PREC
                   URSOR)/CN
E10          1     PROAPOLIPOPROTEIN A-I (HUMAN)/CN
E11          1     PROAPOLIPOPROTEIN A-I (PIG CLONE P34III)/CN
E12          5     PROAPOLIPOPROTEIN A-I (SYNTHETIC HUMAN MUTANT)/CN

=> s E1-E6
             1 "PROANTHOCYANIDIN T3"/CN
             1 "PROANTHOCYANIDIN T4"/CN
             0 "PROANTHOCYANIDIN T5"/CN
             1 "PROANTHOCYANIDIN TETRAMER"/CN
             1 PROANTHOCYANIDINS/CN
             1 PROANTODIANISIDINE/CN
L15          5 ("PROANTHOCYANIDIN T3"/CN OR "PROANTHOCYANIDIN T4"/CN OR "PROANT
               HOCYANIDIN T5"/CN OR "PROANTHOCYANIDIN TETRAMER"/CN OR PROANTHOC
               YANIDINS/CN OR PROANTODIANISIDINE/CN)

=> file hcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               204.97     432.74

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                                 0.00     -55.25

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FILE COVERS 1907 - 19 Mar 2010  VOL 152 ISS 13
FILE LAST UPDATED: 18 Mar 2010  (20100318/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Dec 2009
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USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s l12/thu or l13/thu or l14/thu orl15/thu
MISSING OPERATOR

=> s l12/thu or l13/thu or l14/thu or l15/thu
          1314 L12
       1224625 THU/RL
           219 L12/THU
                 (L12 (L) THU/RL)
           905 L13
       1224625 THU/RL
           121 L13/THU
                 (L13 (L) THU/RL)
             8 L14
       1224625 THU/RL
             1 L14/THU
                 (L14 (L) THU/RL)
             3 L15
       1224625 THU/RL
             1 L15/THU
                 (L15 (L) THU/RL)
L16         255 L12/THU OR L13/THU OR L14/THU OR L15/THU

=> s cholesterol or hypercholesterolem? or hyperlipidem? or atherosclerosis
        209775 CHOLESTEROL
         20691 HYPERCHOLESTEROLEM?
         19658 HYPERLIPIDEM?
         71968 ATHEROSCLEROSIS
L17     270725 CHOLESTEROL OR HYPERCHOLESTEROLEM? OR HYPERLIPIDEM? OR ATHEROSCL
               EROSIS

=> s l16 and l17
L18          20 L16 AND L17

=> s l18 and (PY<2004 or AY<2004 or PRY<2004)
      24050509 PY<2004
       4827719 AY<2004
       4301330 PRY<2004
L19           6 L18 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> d l19 1-6 ti abs bib

L19  ANSWER 1 OF 6  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Search for biologically active novel compounds on the basis of catalytic
     mechanisms of biosynthetic enzymes
AB   Squalene epoxidase (SE) is a non-cytochrome P 450 flavoprotein
     monooxygenase that catalyzes the conversion of squalene to
     (3S)2,3-oxidosqualene, one of the rate-limiting steps of
     cholesterol biogenesis.  Naturally occurring galloyl esters such
     as (-)-epigallocatechin-3-O-gallate (IC50 = 0.69 μM, KI = 0.74 μM),
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the major components of green tea polyphenols, were found to be potent and selective inhibitors of vertebrate SE. A synthetic n-dodecyl gallate (IC50 = 0.061 μM, KI = 0.033 μM) with a hydrophobic side chain showed even more potent inhibition. The presence of galloyl moiety was thus shown to be essential for the enzyme inhibition. The flavin monooxygenase reaction proceeds through formation of the active oxygen species. It was postulated that the enzyme inhibition would be caused by specific binding of gallates to the active site of the enzyme, possibly in close proximity to the FAD binding domain, and by scavenging the reactive oxygen species required for the enzyme reaction. This was supported by mol. modeling studies based on the crystal structure of bacterial p-hydroxybenzoic acid hydroxylase, one of the best characterized flavin monooxygenases that shares 20% amino acid sequence identity with SE.

AN 2003:526423 HCAPLUS <<LOGINID::20100319>>
DN 140:35313
TI Search for biologically active novel compounds on the basis of catalytic mechanisms of biosynthetic enzymes
AU Abe, Ikuro
CS School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, 422-8526, Japan
SO Natural Medicines (Tokyo, Japan) (2003), 57(2), 44-49
CODEN: NMEDEO; ISSN: 1340-3443
PB Japanese Society of Pharmacognosy
DT Journal
LA Japanese

L19 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN
TI DPPH (1,1-diphenyl-2-picrylhydrazyl) radical scavenging activity of flavonoids obtained from some medicinal plants
AB A reactive oxygen species has been implicated in a range of human pathol. diseases such as atherosclerosis and certain cancers. Flavonoids are reported to exhibit various biol. activities, including antioxidative and free radical scavenging activities. Several flavonoids obtained from barley leaves, soybean and some medicinal plants, Silybum marianum, Sophorae Flos, Cinnamon, Ephedrae Herba and Scutellariae Radix, were tested for their DPPH (1,1-diphenyl-2-picrylhydrazyl) radical scavenging activity. The structure-activity relationships suggested that not only the nos. of hydroxy group but also the position of hydroxy group might be important for mediating potent activity.

AN 2001:729087 HCAPLUS <<LOGINID::20100319>>
DN 136:63592
TI DPPH (1,1-diphenyl-2-picrylhydrazyl) radical scavenging activity of flavonoids obtained from some medicinal plants
AU Okawa, Masafumi; Kinjo, Junei; Nohara, Toshihiro; Ono, Masateru
CS Faculty of Pharmaceutical Sciences, Kumamoto University, Kumamoto, 862-0973, Japan
SO Biological & Pharmaceutical Bulletin (2001), 24(10), 1202-1205
CODEN: BPBLEO; ISSN: 0918-6158
PB Pharmaceutical Society of Japan
DT Journal
LA English
OSC.G 32 THERE ARE 32 CAPLUS RECORDS THAT CITE THIS RECORD (32 CITINGS)
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Galloyl esters from rhubarb are potent inhibitors of squalene epoxidase, a key enzyme in cholesterol biosynthesis
AB Galloyl glucoses and galloyl proanthocyanidins obtained from rhubarb (Rhei Rhizoma, Rheum palmatum L., Polygonaceae); e.g. 1,2,6-tri-O-galloyl-β-D-glucose (IC50 = 0.63 μM),

1,6-di-O-galloyl-2-O-cinnamoyl-β-D-glucose (IC50 = 0.58 μM), procyanidin B-2 3,3'-di-O-gallate (IC50 = 0.54 μM), and procyanidin B-5 3,3'-di-O-gallate (IC50 = 0.55 μM), were found to be potent inhibitors of rat squalene epoxidase (SE). The inhibition at submicromolar level was far more potent than that of chemical synthesized substrate analogs. It was demonstrated for the first time that the cholesterol-lowering effect of rhubarb may be attributed to the potent inhibition activities of SE, a rate-limiting enzyme of cholesterol biogenesis.

AN 2001:26947 HCAPLUS <<LOGINID::20100319>>
DN 134:247103
TI Galloyl esters from rhubarb are potent inhibitors of squalene epoxidase, a key enzyme in cholesterol biosynthesis
AU Abe, Ikuro; Seki, Takahiro; Noguchi, Hiroshi; Kashiwada, Yoshiki
CS School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, 422-8526, Japan
SO Planta Medica (2000), 66(8), 753-756
CODEN: PLMEAA; ISSN: 0032-0943
PB Georg Thieme Verlag
DT Journal
LA English
OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Phospholipid complexes of proanthocyanidin A2 as antiatherosclerotic agents
AB The phospholipid complexes of proanthocyanidin A2 are useful for the prevention and the treatment of atherosclerosis and myocardial and cerebral infarctions. Thus, capsules contained a complex of proanthocyanidin A2 with soya phosphatidylcholine 150, lactose 57, modified starch 40, and Mg stearate 3.0 mg.
AN 2000:441613 HCAPLUS <<LOGINID::20100319>>
DN 133:63992
TI Phospholipid complexes of proanthocyanidin A2 as antiatherosclerotic agents
IN Bombardelli, Ezio; Morazzoni, Paolo
PA Indena S.p.A., Italy
SO PCT Int. Appl., 8 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000037062	A2	20000629	WO 1999-EP9854	19991213 <--
WO 2000037062	A3	20000803		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
IT 98MI2732	A1	20000619	IT 1998-MI2732	19981218 <--
IT 1304183	B1	20010308		
CA 2355776	A1	20000629	CA 1999-2355776	19991213 <--
CA 2355776	C	20080318		
AU 2000022830	A	20000712	AU 2000-22830	19991213 <--
AU 763907	B2	20030807		

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     EP 1140115          A2    20011010    EP 1999-966956          19991213 <--
     EP 1140115          B1    20030502
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
     HU 2001004665       A2    20020429    HU 2001-4665            19991213 <--
     HU 2001004665       A3    20030128
     JP 2002532543       T     20021002    JP 2000-589173          19991213 <--
     AT 238803           T     20030515    AT 1999-966956          19991213 <--
     PT 1140115          E     20030829    PT 1999-966956          19991213 <--
     ES 2197708          T3    20040101    ES 1999-966956          19991213 <--
     CN 1146429          C     20040421    CN 1999-814446          19991213 <--
     RU 2248798          C2    20050327    RU 2001-116085          19991213 <--
     SK 284884           B6    20060202    SK 2001-860             19991213 <--
     IL 143751           A     20060705    IL 1999-143751          19991213 <--
     PL 197153           B1    20080331    PL 1999-349534          19991213 <--
     US 6429202          B1    20020806    US 2001-857804          20010611 <--
     NO 2001002944       A     20010614    NO 2001-2944            20010614 <--
     HK 1042430          A1    20041008    HK 2002-103200          20020430 <--
PRAI IT 1998-MI2732      A     19981218  <--
     WO 1999-EP9854      W     19991213  <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G   1     THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT  5     THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19  ANSWER 5 OF 6  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Formulations containing carotenoids an procarotenoids combined with
     polyphenols for the prevention of the damages due to an abnormal
     production of free radicals
AB   The present invention relates to novel formulations and combinations of
     lipophilic and hydrophilic antioxidants and the use thereof in the
     therapeutic, foodstuff, dietetic, and cosmetic fields.  These formulations
     are based on the use of carotenoids, procarotenoids and derivs. thereof
     with polyphenols of catechic structures.  The formulations containing a
     lipophilic antioxidant and an hydrophilic one, can be used in the
     prevention of physiopathol. conditions related at least partially to an
     over-production of free radicals, particularly aging, atherosclerosis
     and cancer.  A lipophilic extract (200 mg) of Lycopersicum esculentum
containing
     5% of lycopene was mixed with 80 mg of procyanidol oligomers from Vitis
     vinifera, 50 mg of natural soy phosphatidylcholine and 50 mg of peanut
     oil.  The products were encapsulated in soft gelatin capsules.
AN   1997:471310  HCAPLUS <<LOGINID::20100319>>
DN   127:140557
OREF 127:27017a,27020a
TI   Formulations containing carotenoids an procarotenoids combined with
     polyphenols for the prevention of the damages due to an abnormal
     production of free radicals
IN   Bombardelli, Ezio; Morazzoni, Paolo
PA   Indena S.p.A., Italy
SO   U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 243,855, abandoned.
     CODEN: USXXAM
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ----------------    ----   --------    --------------------    --------
PI   US 5648377          A      19970715    US 1995-463129          19950605 <--
PRAI IT 1993-MI2688      A      19931221  <--
     US 1994-243855      B2     19940517  <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
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OSC.G   12    THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
RE.CNT  6     THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19  ANSWER 6 OF 6  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Formulations containing carotenoids and procarotenoids combined with
     polyphenols in the prevention of the damages due to an abnormal production
     of free radicals.
AB   The present invention relates to novel formulations and combinations of
     lipophilic and hydrophilic antioxidants and the use thereof in the
     therapeutic, foodstuff, dietetic, and cosmetic fields.  These formulations
     are based on the use of carotenoids, procarotenoids and derivs. thereof
     with polyphenols of catechic and flavanolignan structures.  Said
     formulations, containing a lipophilic antioxidant and an hydrophilic one at
     fixed rations, can be used in the prevention of physiopathol. conditions
     related at least partially to an overprodn. of free radicals, particularly
     aging, atherosclerosis and cancer.
AN   1995:705558  HCAPLUS <<LOGINID::20100319>>
DN   123:93334
OREF 123:16473a,16476a
TI   Formulations containing carotenoids and procarotenoids combined with
     polyphenols in the prevention of the damages due to an abnormal production
     of free radicals.
IN   Bombardelli, Ezio; Morazzoni, Paolo
PA   Indena S.p.A., Italy
SO   Eur. Pat. Appl., 8 pp.
     CODEN: EPXXDW
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
PI   EP 659402           A2     19950628    EP 1994-107676         19940518 <--
     EP 659402           A3     19961218
     EP 659402           B1     20020313
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     CA 2123739          A1     19950622    CA 1994-2123739        19940517 <--
     CA 2123739          C      20040127
     AU 9463132          A      19950713    AU 1994-63132          19940517 <--
     AU 677048           B2     19970410
     AT 214264           T      20020315    AT 1994-107676         19940518 <--
     PT 659402           E      20020628    PT 1994-107676         19940518 <--
     ES 2081781          T3     20020916    ES 1994-107676         19940518 <--
     FI 9402452          A      19950622    FI 1994-2452           19940526 <--
     CN 1111506          A      19951115    CN 1994-106547         19940608 <--
     CN 1082369          C      20020410
     JP 07196534         A      19950801    JP 1994-128661         19940610 <--
     JP 3604422          B2     20041222
     HK 1011616          A1     20020802    HK 1998-112884         19981207 <--
PRAI IT 1993-MI2688      A      19931221  <--
OSC.G   21    THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)


=> s l4 and l17
L20         587 L4 AND L17

=> s l20 and (PY<2003 or AY<2003 or PRY<2003)
      22998491 PY<2003
       4529436 AY<2003
       3999840 PRY<2003
L21         350 L20 AND (PY<2003 OR AY<2003 OR PRY<2003)
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=> fiel registry
FIEL IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    27.33     460.07

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -5.10     -60.35

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DICTIONARY FILE UPDATES:  18 MAR 2010  HIGHEST RN 1211569-35-5

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predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> exp partially hydrolyzed guar/cn
E1            1     PARTIAL Y TO PHAGE RECOMBINASE (SYNECHOCOCCUS STRAIN WH8102
                    GENE SYNW1351)/CN
E2            1     PARTIALLY ARCHAEAL PROTEIN (SULFOLOBUS ACIDOCALDARIUS STRAIN
                     DSM 639)/CN
E3            0 --> PARTIALLY HYDROLYZED GUAR/CN
E4           11     PARTIALLY MEMBRANE-SPANNING PROTEIN (METHANOSPHAERA STADTMAN
                    AE STRAIN DSM 3091)/CN
E5           30     PARTIALLY PROTEIN (METHANOSPHAERA STADTMANAE STRAIN DSM 3091
                    )/CN
E6            1     PARTIALLY PROTEIN, CARBAMOYL-PHOSPHATE SYNTHASE, LARGE CHAIN
                     (METHANOSPHAERA STADTMANAE STRAIN DSM 3091)/CN
E7            1     PARTIALLY PROTEIN, GTPASE (METHANOSPHAERA STADTMANAE STRAIN
                    DSM 3091)/CN
E8            1     PARTICLE (FIFTY FOUR ) (STREPTOCOCCUS PNEUMONIAE STRAIN R6 G
                    ENE FFH)/CN
E9            1     PARTICLE PROTEIN (RICKETTSIA CONORI STRAIN MALISH 7 GENE FFH
                    )/CN
E10           1     PARTICLE PROTEIN (YERSINIA PESTIS STRAIN CO92 GENE FFH)/CN
E11           1     PARTICLEAR/CN
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E12          1     PARTICOL BX/CN

=> exp phgg/cn
E1           1     PHGDHL1 PROTEIN (HUMAN CLONE IMAGE:4991441 GENE PHGDHL1)/CN
E2           1     PHGDHL1 PROTEIN (MOUSE STRAIN FVB/N CLONE MGC:37335 IMAGE:49
                   75777)/CN
E3           0 --> PHGG/CN
E4           1     PHHB, PTERIN-4-ALPHA-CARBINOLAMINE DEHYDRATASE (BRUCELLA MEL
                   ITENSIS BIOVAR ABORTUS STRAIN 9-941 GENE PHHB)/CN
E5           1     PHI/CN
E6           1     PHI (SWINE)/CN
E7           4     PHI 27/CN
E8           1     PHI 27 (CHICKEN)/CN
E9           1     PHI 27 (GUINEA PIG)/CN
E10          1     PHI 27 (HUMAN)/CN
E11          1     PHI 27 (PIG)/CN
E12          1     PHI 27 (RABBIT)/CN

=> file hcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 0.49     460.56

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                                 0.00     -60.35

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FILE COVERS 1907 - 19 Mar 2010  VOL 152 ISS 13
FILE LAST UPDATED: 18 Mar 2010  (20100318/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Dec 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the first quarter of 2010.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s manno-oligo? or mannooligo
         2850 MANNO
       381085 OLIGO?
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           112 MANNO-OLIGO?
                 (MANNO(W)OLIGO?)
             0 MANNOOLIGO
L22        112 MANNO-OLIGO? OR MANNOOLIGO

=> s manno-oligo? or mannooligo?
          2850 MANNO
        381085 OLIGO?
           112 MANNO-OLIGO?
                 (MANNO(W)OLIGO?)
          1022 MANNOOLIGO?
L23       1084 MANNO-OLIGO? OR MANNOOLIGO?

=> s l17 and l23
L24         20 L17 AND L23

=> s PHGG or (partially hydrolyzed guar)
            39 PHGG
        374301 PARTIALLY
        154957 HYDROLYZED
         13804 GUAR
            64 PARTIALLY HYDROLYZED GUAR
                 (PARTIALLY(W)HYDROLYZED(W)GUAR)
L25         68 PHGG OR (PARTIALLY HYDROLYZED GUAR)

=> s l17 and l25
L26         16 L17 AND L25

=> s l24 or l26
L27         36 L24 OR L26

=> s l27 and (PY<2004 or AY<2004 or PRY<2004)
       24050509 PY<2004
        4827719 AY<2004
        4301330 PRY<2004
L28          8 L27 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> d l28 1-8 ti abs bib

L28  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Preparation of acyl glycerol phosphatidylinositol manno-
     oligosaccharides as anti-inflammatory agents
GI
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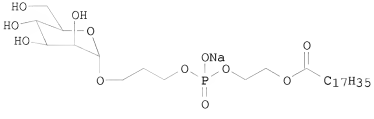
I II



III

AB The present invention is directed to synthetic acyl glycerol phosphatidylinositol manno-oligosaccharides having the formula A-B-E-D, wherein A is R, glyceride I and II; R is H, alkyl, acyl; B is phosphate, phosphonate, sulfonate, carbamate, phosphono-thionate; E is a spacer or linker (CH2)n, (CH2)2-(OCH2CH2)n, cyclohexyl, CHR3CHR4; R3 and R4 are independently H, CH2OH, CH2, alditol residue; n is 1-40; D comprises at least one sugar moiety selected from the group comprising D-mannose, D-galactose, D-glucose, D-glucosamine, N-acetylglucosamine, and 6-deoxy-L-mannose, wherein when D is more than one sugar moiety, the sugar moiety may comprise a single chain of the same or different sugar moieties, or may comprise two or more sep. sugar moieties or chains of sugar moieties attached to E at different sites; with the proviso that when E is -(CH2)n- wherein n = 2 to 16, B is phosphate and D is a monosaccharide or an oligosaccharide, R1 and R2 of A are not both alkyl.is biol. activity similar to PIM (acyl glycerol phosphatidylinositol manno-oligosaccharide) activity, for use in the treatment and prevention of inflammatory or immune cell mediated diseases or disorders. The disease or disorder is elected from the group comprising asthma, allergic rhinitis, dermatitis, psoriasis, inflammatory bowel disease including Crohn's disease and ulcerative colitis, rheumatoid arthritis, multiple sclerosis, diabetes, systemic lupus erythmatosis and atherosclerosis. Thus, III was prepared and tested in mice as anti-inflammatory agent.

AN 2005:472171 HCAPLUS <<LOGINID::20100319>>
DN 143:7937

TI Preparation of acyl glycerol phosphatidylinositol manno-oligosaccharides as anti-inflammatory agents

IN Singh-Gill, Gurmit; Larsen, David Samuel; Jones, Jeremy David; Severn, Wayne Bruce; Harper, Jacquie Lucille

PA The Malaghan Institute of Medical Research, N. Z.; University of Otago; Agresearch Limited

SO PCT Int. Appl., 99 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005049631	A1	20050602	WO 2004-NZ293	20041118 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,				

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG

NZ 529603 A 20031219 NZ 2003-529603 20031118 <--
US 20080249037 A1 20081009 US 2007-580147 20070330 <--
PRAI NZ 2003-529603 A 20031118 <--
NZ 2004-533245 A 20040531
WO 2004-NZ293 W 20041118

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS CASREACT 143:7937; MARPAT 143:7937
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Dietary effect of guar gum and its partially hydrolyzed product on the lipid metabolism and immune function of Sprague-Dawley rats
AB The dietary effect of the water-soluble dietary fibers (WSDF), guar gum, partially hydrolyzed guar gum (PHGG
), glucomannan, highly methoxylated (HM) pectin, on the serum lipid level and Ig (Ig) production of Sprague-Dawley rats was compared with that of water-insol. cellulose. Although serum total cholesterol and triglyceride levels were significantly lower in the rats fed with WSDF than in those fed with cellulose, a decrease in the level of phospholipids was only observed in the rats that had been fed on guar gum or glucomannan. In addition, all WSDF feeding enhanced IgA productivity in the spleen and mesenteric lymph node lymphocyte, although the increase in serum IgA level was only observed in the rats fed on WSDF, and not on PHGG. When mesenteric lymph node lymphocytes were cultured in the presence of various concns. of guar gum or glucomannan, no significant increase in Ig production was apparent. These data suggest that WSDF indirectly enhanced the Ig production of lymphocytes, and that serum lipid reduction and IgA production-enhancing
activities of WSDF were dependent on their mol. sizes.
AN 2000:55670 HCAPLUS <<LOGINID::20100319>>
DN 132:193653
TI Dietary effect of guar gum and its partially hydrolyzed product on the lipid metabolism and immune function of Sprague-Dawley rats
AU Yamada, Koji; Tokunaga, Yoko; Ikeda, Atsushi; Ohkura, Ken-Ichi; Mamiya, Soichi; Kaku, Shihoko; Sugano, Michihiro; Tachibana, Hirofumi
CS Laboratory of Food Chemistry, Department of Bioscience and Biotechnology, Division of Bioresource and Bioenvironmental Sciences, Graduate School of Kyushu University, Fukuoka, 812-8581, Japan
SO Bioscience, Biotechnology, and Biochemistry (1999), 63(12), 2163-2167
CODEN: BBBIEJ; ISSN: 0916-8451
PB Japan Society for Bioscience, Biotechnology, and Agrochemistry
DT Journal
LA English
OSC.G 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Absence of detectable toxicity in rats fed partially hydrolyzed guar gum (K-13) for 13 weeks

AB Toxicity studies were conducted to evaluate acute and subchronic oral toxicity and mutagenicity of partially hydrolyzed guar gum (K-13). In an acute toxicity study, mice and rats were treated with K-13 at a dose of 6000 mg/kg. There were no deaths, so the LD50s were >6000 mg/kg in both species. In a subchronic toxicity study, K-13 was given to rats as a dietary admixt. at concns. of 0.2, 1.0 and 5.0% for 13 wk. There were no effects attributable to K-13 in any examns. K-13 proved to have no mutagenic potential in a reverse mutation test using bacteria.
AN 1997:804255 HCAPLUS <<LOGINID::20100319>>
DN 128:58421
OREF 128:11343a,11346a
TI Absence of detectable toxicity in rats fed partially hydrolyzed guar gum (K-13) for 13 weeks
AU Koujitani, Takatoshi; Oishi, Hidetoshi; Kubo, Yuji; Maeda, Toshihiro; Sekiya, Keiji; Yasuba, Masahi; Matsuoka, Nobuo; Nishimura, Koichi
CS Dep. of Toxicol. and Teratol., Dev. Res. Labs., Dainippon Pharm. Co., Ltd., Osaka, 564, Japan
SO International Journal of Toxicology (1997), 16(6), 611-623
CODEN: IJTOFN; ISSN: 1091-5818
PB Taylor & Francis
DT Journal
LA English
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The cholesterol-lowering effect of guar gum is not the result of a simple diversion of bile acids toward fecal excretion
AB The effects of partially hydrolyzed, nonviscous, guar gum (PHGG) on cholesterol metabolism and digestive balance have been compared with those of native guar gum (GUAR) in rats adapted to 0.4% cholesterol diets. Both types of guar gum elicited acidic fermns. in the large intestine, but only GUAR effectively lowered plasma cholesterol ($P < 0.001$), chiefly in the triglyceride-rich lipoprotein fraction. The biliary bile acid excretion was significantly enhanced in rats fed GUAR ($P < 0.05$), as well as the intestinal and cecal bile acid pool ($P < 0.001$). In rats fed GUAR and to a lesser extent in those fed PHGG, the fecal excretion of bile acids and neutral sterol was higher than in controls ($P < 0.01$). The digestive balance (cholesterol intake-steroid excretion) was pos. in control rats (+47 μmol/d), whereas it was neg. in rats fed GUAR (-20 μmol/d), which could involve a higher rate of endogenous cholesterol synthesis. In rats fed PHGG, the steroid balance remained slightly pos. Liver 3-hydroxy-3methylglutaryl-CoA (HMG-CoA) reductase activity was very low (22 pmol/min/mg protein), owing to cholesterol supplementation, in control rats or in rats fed PHGG, whereas it was markedly higher (+463%) in rats fed GUAR. In conclusion, even if PHGG does alter some parameters of the enterohepatic cycle of cholesterol and bile acids, its effects are not sufficient to elicit a significant cholesterol-lowering effect. The intestinal (ileal or cecal) reabsorption of bile acids was not reduced, but rather increased, by GUAR; nevertheless the intestinal capacities of reabsorption were overwhelmed by the enlargement of the digestive pool of bile acids. In the present model, induction of HMG-CoA reductase probably takes place in the presence of elevated portal bile acid concns.
AN 1997:680456 HCAPLUS <<LOGINID::20100319>>
DN 127:303178
OREF 127:59115a,59118a

TI The cholesterol-lowering effect of guar gum is not the result of a simple diversion of bile acids toward fecal excretion
AU Favier, Marie-Laure; Bost, Pierre-Etienne; Guittard, Christine; Demigne, Christian; Remesy, Christian
CS Lab. Maladies Metaboliques Micronutriments, INRA Clermon-Ferrand/Theix, Ceyrat, 63122, Fr.
SO Lipids (1997), 32(9), 953-959
CODEN: LPDSAP; ISSN: 0024-4201
PB AOCS Press
DT Journal
LA English
OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Functional and physiological properties of partially hydrolyzed guar gum.
AB Partially hydrolyzed guar gum (PHGG) is a relatively new food ingredient that has been evaluated for its safety, physiol. effects and functionality in food over the past 10 yr. Native guar gum is enzymically treated to reduce the average mol. by an order of magnitude. This gives a PHGG that still assays and functions as a soluble dietary fiber. PHGG is being used in many food products in Asia and as a fiber source in medical foods in North America and Europe. This talk will focus on the physiol. data that has been reported for PHGG, in both animals and humans. Most of this data relates to normalization of bowel function. The effect of PHGG on gut flora and cholesterol level will also be discussed.
AN 1997:158964 HCAPLUS <<LOGINID::20100319>>
TI Functional and physiological properties of partially hydrolyzed guar gum.
AU Greenberg, N. A.
CS Strategic Research Group, Sandoz Nutrition Corporation, Minneapolis, MN, 55440, USA
SO Book of Abstracts, 213th ACS National Meeting, San Francisco, April 13-17 (1997), CARB-031 Publisher: American Chemical Society, Washington, D. C.
CODEN: 64AOAA
DT Conference; Meeting Abstract
LA English

L28 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effect of partially hydrolyzed guar gum on fecal output in human volunteers
AB Partially hydrolyzed guar gum (PHGG , average mol. weight 20,000) digested by β-D-mannanase was given as a beverage after every meal (36 g 3 times/day) to 8 healthy men for 4 wk. Diet with PHGG increased fecal weight and output frequency while lowering the pH of feces without affecting fat, protein, or mineral excretion. Among the fecal volatile fatty acids, only HOAc significantly increased. Total serum cholesterol was reduced by a diet with PHGG compared with the controlled diet period, while other serum lipid parameters were unaffected. Thus, PHGG increased the bulking capacity without affecting the utilization of other nutrients.
AN 1993:579870 HCAPLUS <<LOGINID::20100319>>
DN 119:179870
OREF 119:32143a,32146a
TI Effect of partially hydrolyzed guar gum on fecal output in human volunteers

AU Takahashi, Hidehisa; Yang, Sung Ik; Hayashi, Chiharu; Kim, Mujo; Yamanaka, Junzo; Yamamoto, Takehiko
CS Cent. Res. Inst., Taiyo Kagaku Co., Ltd., Yokkaichi, 510, Japan
SO Nutrition Research (New York, NY, United States) (1993), 13(6), 649-57
CODEN: NTRSDC; ISSN: 0271-5317
DT Journal
LA English
OSC.G 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

L28 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of partially hydrolyzed guar gum on postprandial plasma glucose and lipid levels in humans
AB Guar gum, a dietary fiber, partially hydrolyzed enzymically, gives a solution of lower viscosity than intact guar gum. In this study, the authors investigated the influence of partially hydrolyzed guar gum on blood glucose and lipid levels in healthy humans. A glucose tolerance test was performed by giving 15 g of partially hydrolyzed guar gum dissolved in 150 mL of water and 75 g of glucose dissolved in 200 mL of water to each of 5 healthy volunteers. Ingestion of partially hydrolyzed guar gum tended to suppress the increases in both blood glucose and insulin, and there was significant suppression of glucose and insulin levels at 60 min and 90 min after glucose administration, resp. However, there was no delay in the glucose level peak time. In a lipid tolerance test, each of 6 healthy volunteers was given an omelette prepared from 50 g butter and 5 eggs, followed by 15 g of partially hydrolyzed guar gum dissolved in 150 mL of water. Blood total cholesterol, LDL, VLDL, and phospholipid tended to be reduced by the intake of partially hydrolyzed guar gum. The levels of some of these lipids were significantly decreased at various times after the intake of partially hydrolyzed guar gum.
AN 1993:516199 HCAPLUS <<LOGINID::20100319>>
DN 119:116199
OREF 119:20885a,20888a
TI Effects of partially hydrolyzed guar gum on postprandial plasma glucose and lipid levels in humans
AU Yamatoya, Kazuhiko; Sekiya, Keiji; Yamada, Hiroyuki; Ichikawa, Tomio
CS Food, Food Addit. Chem. Div., Dainippon Pharm. Co., Ltd., Osaka, 541, Japan
SO Nippon Eiyo, Shokuryo Gakkaishi (1993), 46(3), 199-203
CODEN: NESGDC; ISSN: 0287-3516
DT Journal
LA Japanese
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L28 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Food fibers with low contents of electrolytes as medications
AB Food fibers isolated from guar gum, tamarind-seed gum, or locust bean gum containing ≤ 0.1 g electrolytes/100 g are given to patients with renal diseases for lowering blood cholesterol level and improving bowel movement. For example, guar gum was treated with plant tissue degrading enzymes (galactomannase, cellulase) to give partially-hydrolyzed guar gum. The hydrolyzate was passed through ion exchangers in chromatog. column to decrease electrolyte content. The eluate was concentrated and spray-dried, and the resulting powder was made into tablets.
AN 1992:658247 HCAPLUS <<LOGINID::20100319>>
DN 117:258247
OREF 117:44531a,44534a

TI Food fibers with low contents of electrolytes as medications
IN Otsu, Keiji; Yamada, Hiroyuki; Sekiya, Keiji; Uno, Yoichiro; Owaya, Kazuhiko
PA Dainippon Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
    CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 04210639	A	19920731	JP 1990-339461	19901130 <--
PRAI JP 1990-339461		19901130 <--		

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FILE 'HCAPLUS' ENTERED AT 17:53:50 ON 19 MAR 2010
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FULL ESTIMATED COST	30.62	491.18

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-6.80	-67.15

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=> s methyl(4a)((mannoologosaccharide) or (manno-oligosacchride) or oligomannose)
       1137737 METHYL
             0 MANNOOLOGOSACCHARIDE
          2850 MANNO
             9 OLIGOSACCHRIDE
             0 MANNO-OLIGOSACCHRIDE
               (MANNO(W)OLIGOSACCHRIDE)
           369 OLIGOMANNOSE
L29          0 METHYL(4A)((MANNOOLOGOSACCHARIDE) OR (MANNO-OLIGOSACCHRIDE) OR
               OLIGOMANNOSE)

=> s methyl(4a)((mannooligosaccharide) or (manno-oligosaccharide) or oligomannose)
       1137737 METHYL
           260 MANNOOLIGOSACCHARIDE
          2850 MANNO
         34691 OLIGOSACCHARIDE
            42 MANNO-OLIGOSACCHARIDE
               (MANNO(W)OLIGOSACCHARIDE)
           369 OLIGOMANNOSE
L30          1 METHYL(4A)((MANNOOLIGOSACCHARIDE) OR (MANNO-OLIGOSACCHARIDE) OR
               OLIGOMANNOSE)

=> d l30 ti abs bib

L30  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2010 ACS on STN
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TI   Synthetic studies on cell-surface glycans.  Part 12.  Proton and carbon-13
     NMR spectral study of synthetic methyl D-mannooligosaccharides
AB   1H- and 13C-NMR spectra for 16 synthetic Me manno-oligosaccharides were
     recorded, and the signals for the anomeric protons and anomeric carbon
     atoms in branched manno-pentaosides and -hexaosides were assigned, based
     on the data for Me manno-biosides and -triosides.  These NMR data
     identified the branching pattern of high-mannose types of glycans of
     glycopeptides with those of unambiguously synthesized
     manno-oligosaccharides, and confirmed the structures proposed for such
     glycans.
AN   1982:123143  HCAPLUS <<LOGINID::20100319>>
DN   96:123143
OREF 96:20233a,20236a
TI   Synthetic studies on cell-surface glycans.  Part 12.  Proton and carbon-13
     NMR spectral study of synthetic methyl D-mannooligosaccharides
AU   Ogawa, Tomoya; Sasajima, Kikuo
CS   Inst. Phys. Chem. Res., Wako, 351, Japan
SO   Carbohydrate Research (1981), 97(2), 205-27
     CODEN: CRBRAT; ISSN: 0008-6215
DT   Journal
LA   English
OSC.G   12    THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)


=> s methyl and ((mannooligosaccharide) or (manno-oligosaccharide) or oligomannose)
      1137737 METHYL
          260 MANNOOLIGOSACCHARIDE
         2850 MANNO
        34691 OLIGOSACCHARIDE
           42 MANNO-OLIGOSACCHARIDE
              (MANNO(W)OLIGOSACCHARIDE)
          369 OLIGOMANNOSE
L31        22 METHYL AND ((MANNOOLIGOSACCHARIDE) OR (MANNO-OLIGOSACCHARIDE)
              OR OLIGOMANNOSE)

=> s l31 and (PY<2004 or AY<2004 or PRY<2004)
      24050509 PY<2004
       4827719 AY<2004
       4301330 PRY<2004
L32        14 L31 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> d l31 1-14 ti abs bib

L31  ANSWER 1 OF 22  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Contribution of complement component C3 and complement receptor type 3 to
     carbohydrate-dependent uptake of oligomannose-coated liposomes
     by peritoneal macrophages
AB   Peritoneal macrophages (PEMs) preferentially and rapidly take up
     oligomannose-coated liposomes (OMLs) and subsequently mature to
     induce a Th-1 immune response following administration of OMLs into the
     peritoneal cavity.  Here, the authors examine the contributions of
     complement component C3 and complement receptor type 3 (CR3) to
     carbohydrate-dependent uptake of OMLs by PEMs.  Effective uptake of OMLs
     into PEMs in vitro was observed only in the presence of peritoneal fluid
     (PF), and OMLs incubated with PF were incorporated by PEMs in vitro in the
     absence of PF.  These phenomena were inhibited by methyl
     -α-mannoside, N-acetylglucosamine or EDTA, but not by galactose.
     Pull-down anal. followed by peptide mass fingerprinting of PF-treated OMLs
     indicated that the OMLs were opsonized with complement fragment iC3b.  In
     vivo uptake of OMLs by PEMs was inhibited by i.p. injection of an antibody
     against CR3, a receptor for iC3b, and OML uptake by PEMs in the peritoneal
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cavity was not observed in C3-deficient mice. Thus, OMLs are opsonized with iC3b in a mannose-dependent manner in the peritoneal cavity and then incorporated into PEMs via CR3.

AN 2009:19097 HCAPLUS <<LOGINID::20100319>>
DN 150:53954
TI Contribution of complement component C3 and complement receptor type 3 to carbohydrate-dependent uptake of oligomannose-coated liposomes by peritoneal macrophages
AU Abe, Yu; Kuroda, Yasuhiro; Kuboki, Noritaka; Matsushita, Misao; Yokoyama, Naoaki; Kojima, Naoya
CS Department of Applied Biochemistry, Tokai University, Hiratsuka, Kanagawa, 259-1292, Japan
SO Journal of Biochemistry (2008), 144(5), 563-570
CODEN: JOBIAO; ISSN: 0021-924X
PB Japanese Biochemical Society
DT Journal
LA English
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Structural basis for mannose recognition by a lectin from opportunistic bacteria Burkholderia cenocepacia
AB Chronic colonization of the lungs by opportunistic bacteria such as Pseudomonas aeruginosa and members of the Bcc (Burkholderia cepacia complex) is the major cause of morbidity and mortality among CF (cystic fibrosis) patients. PA-IIL (lecB gene), a soluble lectin from Ps. aeruginosa, has been the subject of much interest because of its very strong affinity for fucose. Orthologues have been identified in the opportunistic bacteria Ralstonia solanacearum, Chromobacterium violaceum and Burkholderia of Body centered cubic The genome of the J2315 strain of B. cenocepacia, responsible for epidemia in CF centers, contains three genes that code for proteins with PA-IIL domains. The shortest gene was cloned in Escherichia coli and pure recombinant protein, BclA (B. cenocepacia lectin A), was obtained. The presence of native BclA in B. cenocepacia exts. was checked using a proteomic approach. The specificity of recombinant BclA was characterized using surface plasmon resonance showing a preference for mannosides and supported with glycan array expts. demonstrating a strict specificity for oligomannose-type N-glycan structures. The interaction thermodn. of BclA with Me α-D-mannoside demonstrates a dissociation constant (Kd) of 2.75 + 10-6 M. The X-ray crystal structure of the complex with Me α-D-mannoside was determined at 1.7 Å (1 Å = 0.1 nm) resolution The lectin forms homodimers with one binding site per monomer, acting co-operatively with the second dimer site. Each monomer contains two Ca2+ ions and one sugar ligand. Despite strong sequence similarity, the differences between BclA and PA-IIL in their specificity, binding site and oligomerization mode indicate that the proteins should have different roles in the bacteria.
AN 2008:378794 HCAPLUS <<LOGINID::20100319>>
DN 148:443059
TI Structural basis for mannose recognition by a lectin from opportunistic bacteria Burkholderia cenocepacia
AU Lameignere, Emilie; Malinovska, Lenka; Slavikova, Margita; Duchaud, Eric; Mitchell, Edward P.; Varrot, Annabelle; Sedo, Ondrej; Imberty, Anne; Wimmerova, Michaela
CS CERMAV-CNRS (affiliated with Universite Joseph Fourier and belonging to ICMG), Grenoble, F-38041, Fr.
SO Biochemical Journal (2008), 411(2), 307-318
CODEN: BIJOAK; ISSN: 0264-6021

PB Portland Press Ltd.
DT Journal
LA English
OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Antibody- and Fc fusion protein-based therapeutics with enhanced ADCC activity
AB Methods for producing antibody-based therapeutics with enhanced ADCC activity are disclosed. In examples, CHO and hybridoma cells engineered to express antibodies were cultured in the presence of the α-mannosidase I inhibitor, kifunensine. The treatment of cells with kifunensine resulted in the production of antibodies carrying oligomannose-type N-glycans, while the formation of complex-type N-glycans was blocked. The antibodies carrying oligomannose -type glycans exhibited enhanced ADCC activity compared to the same antibodies produced without the kifunensine treatment. Thus, antibodies and Fc fusion proteins carrying oligomannose-type N-glycans are useful for various therapies in which Fc-directed killing of target cells is desirable, for example treating cancers, autoimmune diseases, and other diseases.
AN 2007:464427 HCAPLUS <<LOGINID::20100319>>
DN 146:460605
TI Antibody- and Fc fusion protein-based therapeutics with enhanced ADCC activity
IN McPherson, John M.; Edmunds, Tim; Zhou, Qun
PA Genzyme Corp., USA
SO PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007048122	A2	20070426	WO 2006-US60113	20061020
	WO 2007048122	A3	20070920		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	CA 2626556	A1	20070426	CA 2006-2626556	20061020
	US 20070092521	A1	20070426	US 2006-551679	20061020
	EP 1945665	A2	20080723	EP 2006-846120	20061020
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	JP 2009512697	T	20090326	JP 2008-536643	20061020
PRAI	US 2005-728947P	P	20051021		
	WO 2006-US60113	W	20061020		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L31 ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Purification of 3 monomeric monocot mannose-binding lectins and their evaluation for antipoxviral activity: potential applications in multiple viral diseases caused by enveloped viruses
AB Three monomeric monocot lectins from Zephyranthes carinata, Zephyranthes candida, and Gloriosa superba with carbohydrate specificity towards mannose derivs. and (or) oligomannose have been isolated and purified from their storage tissues. The lectins were purified by anion-exchange chromatog. on DEAE-Sephacyl and by gel filtration chromatog. on Biogel P-200 followed by high-performance liquid chromatog. The purified lectins, Z. carinata, Z. candida, and G. superba had mol. masses of 12, 11.5, and 12.5 kDa, resp., as determined by gel filtration and SDS-PAGE, indicating that they are monomers. In a hapten inhibition assay, methyl-α-D-mannopyranoside inhibited agglutination of both Z. candida and Z. carinata; the latter was also inhibited by Man(α1-2)Man and Man(α1-3)Man. Gloriosa superba showed inhibition only with Man(α1-4)Man of all of the sugars and glycoproteins tested. All purified lectins agglutinated red blood cells from rabbit, whereas G. superba was also reactive towards erythrocytes from guinea pig. All of the lectins were nonglycosylated and did not require metal ions for their activity. They were labile above 60° and were affected by denaturing agents such as urea, thiourea, and guanidine-HCl. The lectins were virtually nonmitogenic, like other members of Amaryllidaceae and Liliaceae. Of the 3 lectins, G. superba was found to be highly toxic to the BSC-1 cell line (African green monkey kidney epithelial cells), while both of the Zephyranthes species showed significant in vitro inhibition of poxvirus replication in BSC-1 cells without any toxic effects to the cells. In addition, Z. candida also exhibited significant anticancer activity against SNB-78, a CNS human cancer cell line.
AN 2007:407425 HCAPLUS <<LOGINID::20100319>>
DN 146:394419
TI Purification of 3 monomeric monocot mannose-binding lectins and their evaluation for antipoxviral activity: potential applications in multiple viral diseases caused by enveloped viruses
AU Kaur, Amandeep; Kamboj, Sukhdev Singh; Singh, Jatinder; Singh, Rajinder; Abrahams, Melissa; Kotwal, Girish J.; Saxena, A. K.
CS Department of Molecular Biology and Biochemistry, Guru Nanak Dev University, Amritsar, 143 005, India
SO Biochemistry and Cell Biology (2007), 85(1), 88-95
CODEN: BCBIEQ; ISSN: 0829-8211
PB National Research Council of Canada
DT Journal
LA English
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

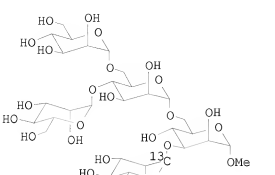
L31 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The use of cysteamine and its derivatives in avian influenza vaccine for improving its immunity
AB The invention pertains to the use of cysteamine and its derivs. e.g. CoA, taurine, cystamine, pantethine or cysteamine precursor in avian influenza vaccine (H5N1 or H5N2) for improving its immunity. Cysteamine and its derivs. (about 30%) can be formulated with stabilizer (10%), filler, binder (5-40%), coating carrier and corrective etc and added to fodder at a concentration about 50-1000 ppm. Cysteamine and its derivs., with a concentration about 0.25-75%, can also be formulated with vitamin C 0.1-5%, soluble vitamin E 0.1-5%, oligo-mannose 1-7.5%, D-ribose 0.2-7.5% and physiol. saline in balance into injections.

AN 2007:5876 HCAPLUS <<LOGINID::20100319>>
DN 146:140988
TI The use of cysteamine and its derivatives in avian influenza vaccine for improving its immunity
IN Wen, Qintang; Chi, Hao; Xu, Jinxian
PA Walcom Animal Science (I.P.5) Limited, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 14pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1883705	A	20061227	CN 2006-10081439	20060519
PRAI CN 2006-10081439		20060519		

L31 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Indentification of locust bean gum hydrolysates by Trichoderma harzianum β-mannanase and their growth activity to Bifidobacterium spp.
AB This study was performed to elucidate substrate specificity of Trichoderma harzianum β-mannanase to the locust bean gum galatomannan. The medium composition for enzyme production was: 3% cellulose, 3% corn steep liquor,
1% KH2PO4, 0.2% (NH4)2SO4, and incubation was 115 h at 28°C. The β-mannanase exhibited maximum activity at pH 4.5 and 60°. Locust bean gum galactomannan was hydrolyzed by the β-mannanase, and then the hydrolyzates were separated by activated carbon column chromatog. By TLC was shown that the main hydrolyzates were composed of D.P 4 and 7 galactosyl mannooligosaccharides. The structure of D.P4 and 7 oligosaccharides was elucidated by methylation anal. To investigate the effects of locust bean gum galactosyl mannooligosaccharides on the in vitro growth of Bifidobacterium longum, B. bifidum, and B. breve, the bifidobacteria were cultivated individually on the modified-MRS medium containing carbon source such as D.P 4 and 7 galactosyl mannooligosaccharides. B. longum grew up 3.4-fold and 4.3-fold more effectively by the replacement of D.P 4 and 7 galactosyl mannooligosaccharides as the carbon source comparing to the standard MRS.
AN 2006:73123 HCAPLUS <<LOGINID::20100319>>
DN 145:412917
TI Indentification of locust bean gum hydrolysates by Trichoderma harzianum β-mannanase and their growth activity to Bifidobacterium spp.
AU Kim, Yu-Jin; Park, Gwi-Gun
CS Department of Food and Bioengineering, Kyungwon University, Seoungnam, 461-701, S. Korea
SO Han'guk Eungyong Sangmyong Hwahakhoeji (2005), 48(4), 364-369
CODEN: HESHAE; ISSN: 1738-2203
PB Korean Society for Applied Biological Chemistry
DT Journal
LA Korean

L31 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI An easy access to a 3,6-branched mannopentaoside bearing one terminal [1-13C]-labeled D-mannopyranose residue
GI



I

AB Me 2,4-di-O-benzoyl-α-D-mannopyranoside was used as a key intermediate in the synthesis of 3,6-branched mannopentaoside I bearing one terminal D-[1-13C]mannopyranose residue via mannosylation.
AN 2005:1281559 HCAPLUS <<LOGINID::20100319>>
DN 145:438813
TI An easy access to a 3,6-branched mannopentaoside bearing one terminal [1-13C]-labeled D-mannopyranose residue
AU Abronina, P. I.; Backinowsky, L. V.; Grachev, A. A.; Sedinkin, S. L.; Malysheva, N. N.
CS N. D. Zelinsky Institute of Organic Chemistry, Russian Academy of Sciences, Moscow, 119991, Russia
SO Russian Chemical Bulletin (2005), 54(5), 1287-1293
CODEN: RCBUEY; ISSN: 1066-5285
PB Springer
DT Journal
LA English
OS CASREACT 145:438813
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Determination of infection by the immune response to a carbohydrate moiety
AB The author discloses a method determining a viral infection by detecting immune reactivity against a carbohydrate moiety associated with the virus. In one example, antibodies to the oligomannose determinant on human immunodeficiency virus are detected by ELISA using immobilized gp120.
AN 2005:903092 HCAPLUS <<LOGINID::20100319>>
DN 143:227914
TI Determination of infection by the immune response to a carbohydrate moiety
IN Fish, Falk
PA Inverness Medical Switzerland GmbH, Switz.
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005078443	A1	20050825	WO 2005-IL167	20050210
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,				

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2004-543928P P 20040213
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 9 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Identification of a novel mannose-capped lipoarabinomannan from Amycolatopsis sulphurea
AB The genus Amycolatopsis is a member of the phylogenetic group nocardioform actinomycetes, which also includes the genus Mycobacterium . Members of this group have a characteristic cell envelope structure, dominated by various complex lipids and polysaccharides. Amongst these, lipoglycans are of particular interest since mycobacterial lipoarabinomannans are important immunomodulatory mols. In this study we report the isolation and structural characterization of Amycolatopsis sulphurea lipoarabinomannan, designated AsuLAM. SDS/PAGE anal. revealed that AsuLAM was of an intermediate size between Mycobacterium tuberculosis lipoarabinomannan and lipomannan, confirmed by matrix-assisted laser-desorption ionization-time-of-flight mass spectrometry that predicted an average mol. mass of 10 kDa. Using a range of chemical degrdns., NMR expts. and capillary electrophoresis anal., AsuLAM was revealed as an original structure. The mannosyl-phosphatidyl-myo-inositol anchor exhibits a single acyl-form, characterized by a diacylated glycerol moiety, and contains, as one of the main fatty acids, 14-methyl -pentadecanoate, a characteristic fatty acid of the Amycolatopsis genus. AsuLAM also contains a short mannan domain; and is dominated by a multi-branched arabinan domain, composed of an (α1→5)-Araf (arabinofuranose) chain substituted, predominately at the O-2 position, by a single β-Araf. The arabinan domain is further elaborated by mannooligosaccharide caps, with around one per mol. This is the first description of mannooligosaccharide caps found in a nonmycobacterial LAM. AsuLAM was unable to induce the production of the pro-inflammatory cytokine tumor necrosis factor α when tested with human or murine macrophage cell lines, reinforcing the paradigm that mannose-capped LAM are poor inducers of pro-inflammatory cytokines.
AN 2003:442035 HCAPLUS <<LOGINID::20100319>>
DN 139:304229
TI Identification of a novel mannose-capped lipoarabinomannan from Amycolatopsis sulphurea
AU Gibson, Kevin J. C.; Gilleron, Martine; Constant, Patricia; Puzo, Germain; Nigou, Jerome; Besra, Gurdyal S.
CS Department of Microbiology and Immunology, University of Newcastle, Newcastle-upon-Tyne, NE2 4HH, UK
SO Biochemical Journal (2003), 372(3), 821-829
CODEN: BIJOAK; ISSN: 0264-6021
PB Portland Press Ltd.
DT Journal
LA English
OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI New mannotriosides and trimannosides as potential ligands for mannose-specific binding proteins
AB The α-D-mannopyranosyl and 3,6-di-O-(α-D-mannopyranosyl)-

α-D-mannopyranosyl neoglycolipids and the branched and cluster trimannosidic acids have been made in connection with studies of liposomes as transporters of antigens to dendritic cells.

AN 2002:790625 HCAPLUS <<LOGINID::20100319>>
DN 138:153724
TI New mannotriosides and trimannosides as potential ligands for mannose-specific binding proteins
AU Furneaux, Richard H.; Pakulski, Zbigniew; Tyler, Peter C.
CS Industrial Research Ltd., Lower Hutt, N. Z.
SO Canadian Journal of Chemistry (2002), 80(8), 964-972
CODEN: CJCHAG; ISSN: 0008-4042
PB National Research Council of Canada
DT Journal
LA English
OS CASREACT 138:153724
OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Molecular and enzymic properties of recombinant 1,2-α-mannosidase from Aspergillus saitoi overexpressed in Aspergillus oryzae cells
AB For the construction of an over-expression system of the intracellular 1,2-α-mannosidase (EC 3.2.1.113) gene (msdS) from Aspergillus saitoi (now designated Aspergillus phoenicis), the N-terminal signal sequence of the gene was replaced with that of the aspergillopepsin I (EC 3.4.23.18) gene (apnS) signal, one of the same strains as described previously. Then the fused 1,2-α-mannosidase gene (f-msdS) was inserted into the NotI site between P-No8142 and T-agdA in the plasmid pNAN 8142 (9.5 kbp) and thus the Aspergillus oryzae expression plasmid pNAN-AM1 (11.2 kbp) was constructed. The fused f-msdS gene has been over-expressed in a transformant A. oryzae niaD AM1 cell. The recombinant enzyme expressed in A. oryzae cells was purified to homogeneity in two steps. The system is capable of making as much as about 320 mg of the enzyme/L of culture. The recombinant enzyme has activity with methyl -2-O-α-D-mannopyranosyl α-D-mannopyranoside at pH 5.0, while no activity was determined with methyl-3-O-α-D-mannopyranosyl α-D-mannopyranoside or methyl-6-O-α-D-mannopyranosyl α-D-mannopyranoside. The substrate specificity of the enzyme was analyzed by using pyridylaminated (PA)-oligomannose-type sugar chains, Man9-6(GlcNAc)2-PA (Man is mannose; GlcNAc is N-acetylglucosamine). The enzyme hydrolyzed Man8GlcNAc2-PA (type M8A) fastest, and M6C {Manα1-3[Manα1-2Manα1-3(Manα1-6)Manα1-6]Manβ1-4GlcNAcβ1-4GlcNAc-PA} slowest, among the PA-sugar chains. Mol.-mass values of the enzyme were determined to be 63 kDa by SDS/PAGE and 65 kDa by gel filtration on Superose 12, resp. The pI value of the enzyme was 4.6. The N-terminal amino acid sequence of the enzyme was GSTQSRADAIKAAFSHAWDGYLQY, and sequence anal. indicated that the signal peptide from apnS gene was removed. The molar absorption coefficient, ε, at 280 nm was determined as 91,539 M-1 cm-1. Contents of the secondary structure (α-helix, β-structure and the remainder of the enzyme) by far-UV CD determination were about 55, 38 and 7%, resp. The melting temperature, Tm, of the enzyme was 71°C by differential scanning calorimetry. The calorimetric enthalpy, ΔHcal, of the enzyme was calculated as 13.3 kJ kg of protein-1. Determination of 1 g-atom of Ca2+/mol of enzyme was performed by atomic-absorption spectrophotometry.

AN 1999:456823 HCAPLUS <<LOGINID::20100319>>
DN 131:254073
TI Molecular and enzymic properties of recombinant 1,2-α-mannosidase from Aspergillus saitoi overexpressed in Aspergillus oryzae cells

AU Ichishima, Eiji; Taya, Noriyuki; Ikeguchi, Masamichi; Chiba, Yasunori; Nakamura, Motoyoshi; Kawabata, Choko; Inoue, Takashi; Takahashi, Koji; Minetoki, Toshiki; Ozeki, Kenji; Kumagai, Chieko; Gomi, Katsuya; Yoshida, Takashi; Nakajima, Tasuku
CS Department of Bioengineering, Faculty of Engineering, Soka University, Tokyo, 192-8577, Japan
SO Biochemical Journal (1999), 339(3), 589-597
CODEN: BIJOAK; ISSN: 0264-6021
PB Portland Press Ltd.
DT Journal
LA English
OSC.G 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS RECORD (29 CITINGS)
RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Difference in binding-site architecture of the serum-type and liver-type mannose-binding proteins
AB The carbohydrate-recognition domains (CRDs) of the serum-type and the liver-type mannose-binding proteins (MBPs) from rat display different binding characteristics toward mannose-rich oligosaccharides derived from N-glycosides, despite the overall similarity in their binding site architecture, oligomeric status, and actual binding specificity at the monosaccharide level. The liver-type MBP CRD of rat (MBP-C) bound Me glycosides of certain mannobioses and -trioses, which are part of the mannose-rich N-glycoside, more tightly than Me α-mannopyranoside. In contrast, the serum-type MBP CRD of rat (MBP-A) bound all the Me glycosides of manno-oligosaccharide and Me α-mannopyranoside with similar affinities. The mannobioses and -triose most strongly bound to MBP-C CRD were Manα-OMe and Manα (1-2)Manα(1-6)Manα-OMe, resp. From these and other data, it is postulated that the binding site of MBP-C has an extended area of interaction, probably the size of a mannotriose, whereas MBP-A interacts essentially with one mannose residue.
AN 1997:311948 HCAPLUS <<LOGINID::20100319>>
DN 127:30587
OREF 127:5805a,5808a
TI Difference in binding-site architecture of the serum-type and liver-type mannose-binding proteins
AU Lee, Reiko T.; Lee, Yuan C.
CS Dep. of Biology, Johns Hopkins Univ., Baltimore, MD, 21218, USA
SO Glycoconjugate Journal (1997), 14(3), 357-363
CODEN: GLJOEW; ISSN: 0282-0080
PB Chapman & Hall
DT Journal
LA English
OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Characterization of a 180 kDa molecule apparently reactive with recombinant L-selectin
AB In the present study we identified a 180 kDa mol. (p180) in rat lymph nodes (LN) apparently reactive with silkworm derived recombinant L-selectin (LEC-IgG) in a Ca2+-dependent manner. Anal. of amino acid sequence revealed that p180 has a strong homol. to the macrophage mannose receptor (MMR), which was corroborated by the observation that p180 reacted with polyclonal anti-alveolar MMR antibody and mannosyl-BSA-agarose. In agreement with this notion, the binding of p180 to the silkworm LEC-IgG was inhibited by α- methyl

-δ-mannoside. However, in sharp contrast to its reactivity against the silkworm LEC-IgG, p180 failed to bind LEC-IgG produced by COS-7 cells, suggesting that p180 reacted with the silkworm LEC-IgG through the recognition of oligomannose-type oligosaccharides expressed on the silkworm products and that the lectin activity of L-selectin was not involved in the interaction. These results, together with the immunohistochem. studies showing that p180 was absent from the majority of high endothelial venules (HEV) but present in medullary macrophages, led us to conclude that p180 obtained from LN lysates by the use of the silkworm LEC-IgG is not a physiol. ligand for L-selectin, warning against the use of recombinant proteins expressed in the baculovirus/silkworm expression system for the detection of carbohydrate ligands.

AN 1997:311850 HCAPLUS <<LOGINID::20100319>>
DN 127:32752
OREF 127:6329a,6332a
TI Characterization of a 180 kDa molecule apparently reactive with recombinant L-selectin
AU Kawashima, Hiroto; Watanabe, Norifumi; Li, Yong-Fei; Hirose, Mayumi; Miyasaka, Masayuki
CS Dep. of Bioregulation, Biomedical Research Center, Osaka University Medical School, Suita, 565, Japan
SO Glycoconjugate Journal (1997), 14(3), 321-330
CODEN: GLJOEW; ISSN: 0282-0080
PB Chapman & Hall
DT Journal
LA English
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2010 ACS on STN
TI A comparison of the fine saccharide-binding specificity of Dioclea grandiflora lectin and concanavalin A
AB The lectin from the seeds of Dioclea grandiflora (DGL) is a Man/Glc-specific tetrameric protein with phys. and saccharide-binding properties reported to be similar to that of the jack bean lectin Con A. Unlike other plant lectins, both DGL and ConA bind with high affinity to the core trimannoside moiety, 3,6-di-O-(α-D-mannopyranosyl)-α-δ-mannopyranoside, which is present in all asparagine-linked carbohydrates. Hemagglutination inhibition techniques were used to investigate binding of DGL and ConA to a series of mono- and dideoxy analogs of Me 3,6-di-O-(α-D-mannopyranosyl)-α-D-mannopyranoside and to a series of asparagine-linked oligomannose and complex oligosaccharides and glycopeptides. Thus, both DGL and ConA recognize epitopes on all three residues of the trimannoside: the 3-, 4-, and 6-hydroxyl groups of the α(1 6)Man residue, the 3-hydroxyl group of the α(1-3)Man residue, and the 2- and 4-hydroxyl groups of the central Man residue of the core trimannoside. However, unlike ConA, DGL does not bind to biantennary complex carbohydrates. This was confirmed by showing that biantennary complex glycopeptides do not bind to a DGL-Sepharose affinity column. Unlike ConA, DGL does not show enhanced affinity for a large N-linked oligomannose carbohydrate (Man9 glycopeptide) relative to the trimannoside. Thus, DGL and ConA share similar epitope recognition of the core trimannoside moiety. However, they exhibit differences in their fine specificities for larger N-linked oligomannose and complex carbohydrates.
AN 1997:3989 HCAPLUS <<LOGINID::20100319>>
DN 126:183825
OREF 126:35445a,35448a
TI A comparison of the fine saccharide-binding specificity of Dioclea grandiflora lectin and concanavalin A

AU Gupta, Dipti; Oscarson, Stefan; Raju, T. Shantha; Stanley, Pamela; Toone, Eric J.; Brewer, C. Fred

CS Departments Molecular Pharmacology Microbiology Immunology, Albert Einstein College Medicine, Bronx, NY, 10461, USA

SO European Journal of Biochemistry (1996), 242(2), 320-326
CODEN: EJBCAI; ISSN: 0014-2956
PB Springer
DT Journal
LA English